

# DOCUMENT D'AUTO-ÉVALUATION

## DEPARTMENT 3 Networks, Systems and Services



01010100  
01101111  
01101100  
01100111  
01100001  
01101000  
01110100  
01100110  
1110000101  
1110001011  
00001011  
11111111

Loria



Inria



En partenariat avec :





# Table des matières

<b>DAE Département 3 : Réseaux, Systèmes et Services</b>	<b>5</b>
Retour sur l'évaluation 2011-2016 . . . . .	7
Critère 1 : qualité et production scientifiques . . . . .	7
Critère 2 : rayonnement et attractivité académiques . . . . .	7
Critère 3 : interactions avec l'environnement économique, social, culturel et sanitaire . . . . .	8
Critère 4 : organisation et vie du département . . . . .	8
Critère 5 : implication dans la formation par la recherche . . . . .	8
Critère 6 : perspectives et stratégie scientifique à cinq ans . . . . .	9
Domaine 3 : Production scientifique . . . . .	10
Référence 1 : La production scientifique de l'équipe satisfait à des critères de qualité . . . . .	10
Synopsis . . . . .	10
Composition . . . . .	10
Research topics . . . . .	10
Main Results . . . . .	12
Scientific production and quality . . . . .	16
Academic reputation and appeal . . . . .	18
Life of the department . . . . .	20
Long-term academic relations . . . . .	21
Référence 2 : La production scientifique est proportionnée au potentiel de recherche de l'équipe et répartie entre ses personnels . . . . .	21
Domaine 4 : Inscription des activités de recherche dans la société . . . . .	21
Référence 1 : L'équipe se distingue par la qualité de ses interactions non-académiques . . . . .	21
Référence 2 : L'équipe développe des produits à destination du monde socio-économique . . . . .	22
Référence 3 : L'équipe partage ses connaissances avec le grand public et intervient dans des débats de société . . . . .	22
<b>Références bibliographiques du département 3</b>	<b>25</b>



# DAE Département 3 : Réseaux, Systèmes et Services

## DEPARTMENT HEAD

Ye-Qiong Song



Department 3, entitled *Networks, Systems and Services*, is composed of four research teams.

*COAST* team focuses on large-scale web- and cloud-based trustworthy collaborative service systems, moving definitely away from the traditional central authority-based collaboration approach. *OPTIMIST* tackles the optimization issues of complex and combinatorial systems by both developing fundamental models and solving practical optimization problems raised by a broader range of sectors (e.g., computer networks and systems, transportation, energy systems, etc.). *RESIST* works on network and service monitoring and management with a strong emphasis on the security issues of Internet and IoT as well as on large-scale experimental platform development (e.g., Grid'5000). *SIMBIOT* aims at developing distributed and embedded solutions for IoT and cyber-physical systems capable of providing real-time quality of service and high resilience.

While each team works on its specific research topics to achieve clearly defined targets, the four teams of D3 also share common backgrounds and some cross-team research topics, including distributed systems and algorithms, optimization algorithms and tools, resource allocation, simulation and co-simulation tools, large-scale network and system emulation and experimental platforms (e.g. Grid5000). They mainly interact each other through cross-team PhD thesis and joint projects. In addition, the department seminars and PhD days are common places to exchange and boost new project ideas.





# DAE Département 3 : Réseaux, Systèmes et Services

## 1. Retour sur l'évaluation 2011-2016

### Critère 1 : qualité et production scientifiques

**Appréciation et recommandations :** Le département D3 se situe à un très bon niveau à l'échelle nationale sur l'ensemble de ses thématiques et au meilleur niveau international en gestion de réseau. Les contributions sont significatives et le comité d'experts apprécie le soin apporté à la méthodologie d'expérimentation, au développement logiciel et à la mise en œuvre de plateformes. Le comité d'experts encourage le département à adopter une politique claire sur les activités en perte de vitesse et à inciter ses membres à publier dans des supports à plus large spectre. Rappelons que les deux thématiques en perte de vitesse indiquées par le comité d'évaluation HCERES sont le calcul haute performance (HPC) et les réseaux embarqués temps réel, liées notamment à la disparition des deux équipes ALGORILLE et TRIO pendant la précédente période d'évaluation (2011-2016). Le département a su définir sa politique claire vis à vis de ces deux thématiques (abandon de HPC et maintien de réseaux temps réel), tout en restructurant les équipes existantes pour mieux intégrer les membres restant sur ces deux thématiques. C'est ainsi que l'équipe RESIST a pu développer un axe fort en plateformes expérimentales large-échelle (e.g., Grid'5000) autour d'un ancien membre d'ALGORILLE, et l'équipe SIMBIOT a développé deux axes : l'un sur l'algorithmique distribuée et parallèle pour les systèmes embarqués dont la puissance ne cesse de croître avec des architectures multi-coeur et GPU, l'autre se focalise sur la qualité de service temps réel dans les réseaux embarqués et Internet des objets pour des systèmes cyber-physiques qui a connu un besoin croissant dans l'industrie 4.0.

Par ailleurs, nous avons élargi le spectre de nos supports de publications, que ce soit en réseaux, systèmes distribués et optimisation (cf. section 2.5).

### Critère 2 : rayonnement et attractivité académiques

**Appréciation et recommandations :** Le département jouit d'une très bonne reconnaissance internationale : comités éditoriaux de revue, pilotage de groupes de travail de standardisation. Son implication dans l'animation de la recherche nationale est excellente. Les nouvelles équipes créées devront trouver leur place au niveau international pour émerger réellement. SIMBIOT et OPTIMIST doivent définir des axes de recherche suffisamment clairs pour obtenir un excellent niveau de reconnaissance. Le département doit réfléchir à une politique d'attractivité, qui lui permette, sur le long terme, de recruter de nouveaux chercheurs.

SIMBIOT a défini trois axes de recherche portant sur les méthodes et outils de conception, les algorithmes parallèles et distribués, et la qualité de service des réseaux pour les systèmes cyber-physiques. OPTIMIST s'est focalisé sur le développement des méthodes d'optimisation pour la résolution des problèmes complexes, avec des vraies applications dans les domaines de réseaux, cloud, transport et énergie. Ces fléchages thématiques clairs ont permis d'obtenir des résultats publiés dans des journaux et conférences internationaux de premier plan (cf. section 2.5).

En termes d'attractivité, nous avons recruté 1 PR (2018), 1 MCF et 1 CR Inria en 2021. Nous avons aussi accueilli et intégré trois collègues de Metz (1 PR dans OPTIMIST et 2 MCF dans SIMBIOT). Enfin nous avons une chaire Inria internationale et Professor@UL depuis 2017.

Le recrutement de chercheurs (CR et DR) reste toujours un point de difficulté, ceci malgré nos efforts de présenter pendant plusieurs années des très bons candidats aux concours de CR Inria et CNRS. Nous allons poursuivre cet effort en repérant en amont d'excellents candidats potentiels, en les invitant à faire des séminaires au département et les aidant à préparer leur dossier d'intégration.

### Critère 3 : interactions avec l'environnement économique, social, culturel et sanitaire

**Appréciation et recommandations :** Le département D3 a de très fortes interactions avec l'environnement économique, social, culturel et sanitaire. Le transfert est un point fort du département, qui doit rester vigilant pour conserver un bon équilibre entre recherche et ingénierie. Le département D3 développe de nombreuses interactions avec les entreprises ; il est aussi très actif dans la médiation scientifique, où toutes les équipes sont impliquées et certains membres ont des actions remarquables et reconnues au niveau régional, national et européen. Le département doit poursuivre son investissement tout en faisant face au départ ou à la prise de responsabilités de certains membres très impliqués sur ces sujets. Il faut aussi veiller à ce qu'une activité de valorisation et de transfert trop importante n'oriente pas trop fortement certaines activités de recherche vers des problématiques trop centrées sur l'ingénierie.

Une part importante de nos activités relève de la recherche appliquée avec la nécessité de validation expérimentale. Maintenir ce contact privilégié avec le monde socio-économique est primordial pour nous alimenter en problématiques de recherche, en plateformes expérimentales et en valorisation et transfert. Nous avons veillé à ce que chaque contrat comporte un volet recherche clairement identifié, avec dans la mesure du possible une thèse ou un post-doctorat.

### Critère 4 : organisation et vie du département

**Appréciation et recommandations :** Le département a connu une forte restructuration qui doit se poursuivre. Il doit veiller à ce que les thématiques de recherche ne s'éparpillent pas sur un spectre trop large. Il doit aussi développer l'animation scientifique qui s'avère cruciale pour accroître les interactions entre équipes et développer sa cohérence interne. Le département pourrait tirer davantage profit de ses multiples compétences pour susciter des projets au carrefour de plusieurs équipes (stages de master, doctorants, participation conjointe à des projets collaboratifs). Le département devrait également encourager ses membres à passer leur habilitation à diriger des recherches.

Depuis la dernière restructuration, la composition du département est restée stable avec 4 équipes. Les thématiques de recherche sont clairement définies dans les équipes. Le département veille à ce que l'ensemble des thématiques du département soit cohérent. Il incite fortement les interactions inter-équipe, au travers notamment de plusieurs thèses inter-équipes et inter-départements.

Le département, tout comme le laboratoire, encourage constamment ses membres à passer leur HDR, en donnant par exemple la priorité aux nouveaux HDR lors de l'attribution des contrats doctoraux. Malgré cela, durant la période, seulement 2 HDR sont soutenues dans le département, ce qui reste encore faible au vu de son potentiel. Toutefois, la récente restriction sur le nombre total d'autorisations de co-encadrement d'un non-HDR devrait accélérer le processus.

### Critère 5 : implication dans la formation par la recherche

**Appréciation et recommandations :** Le département a une très forte implication dans la formation par la recherche et dans les structures doctorales. En revanche, son implication dans l'encadrement de doctorants et de post-doctorants n'est pas suffisante. Le département doit poursuivre ses efforts pour

recruter et former plus de doctorants et de post-doctorants, et maintenir un ratio plus équilibré entre post-doctorants et ingénieurs.

Les membres du département sont constamment impliqués dans la responsabilité de la commission mention informatique de l'école doctorale IAEM. Par rapport à la période précédente (2011-2016), le nombre de thèses soutenues pendant la période 2016-2021 a fortement progressé, passé de 27 à 45 (dont 33 durant 2016-2020, et 12 en 2021). Le nombre de post-doctorants a bien augmenté, passé ainsi de 16 à 20, tandis que le nombre d'ingénieurs a diminué, passé de 49 à 26, ce qui donne un ratio plus équilibré entre post-doctorants et ingénieurs.

## Critère 6 : perspectives et stratégie scientifique à cinq ans

**Appréciation et recommandations :** Le projet des équipes du D3 est fondé sur des thématiques prometteuses : [...] Toutefois, le rôle du département est essentiel pour mener à bien les évolutions prévues et insuffler une vraie dynamique d'échanges qui permettra à terme d'ajuster sa structuration. Le département D3 a connu de très nombreuses évolutions. Il lui faut maintenant assurer la cohérence, à la fois au sein des équipes et entre les équipes. L'unité doit réfléchir au futur des activités de recherche en calcul haute performance, [...] En présence de compétences très variées en son sein, l'équipe SIMBIOT doit affiner son projet de recherche, en préciser l'objectif global, mettre en évidence ses spécificités, notamment en termes d'approche méthodologique et de domaine d'application. Il faut éviter l'isolement de l'équipe OPTIMIST au sein du département. Il faut l'encourager à poursuivre ses collaborations avec les autres équipes du département. Le thème sur l'optimisation verra sa pertinence renforcée dans le contexte du département quand l'équipe OPTIMIST étudiera de manière prioritaire, du point de vue de l'optimisation, les systèmes étudiés par les autres équipes du département.

La structure du département 3 s'est bien stabilisée pendant la période. L'unité et le département ont pris acte de la disparition de la thématique calcul haute performance, tout en maintenant le noeud important Nancéien de Grid'5000 en tant qu'infrastructure et plateforme expérimentale pour la recherche reproductible, non seulement en HPC, mais aussi et surtout en cloud/Edge, big data et réseaux. Cette politique est ainsi renforcée par le recrutement d'un ingénieur CNRS dans le service SISR qui coordonne l'ensemble des activités. SIMBIOT a affiné son projet de recherche selon trois axes, mettant en évidence la complémentarité des compétences variées en algorithmes distribués, réseaux et systèmes multi-agent pour les systèmes cyber-physiques (cf. site web de l'équipe : <https://simbiot.loria.fr/> et le *portfolio D3-1* qui contient une synthèse plus détaillée du département 3 et un rapport d'activités de SIMBIOT pour 2016-2020). OPTIMIST a vu ses effectifs renforcés avec l'intégration d'un PR en 2018. Malgré sa taille modérée (4 permanents dont 3 HDR), l'équipe se positionne comme experte en modélisation de systèmes complexes et en développement des méthodes d'optimisation combinatoire et programmation linéaire et non-linéaire. L'optimisation des systèmes distribués et réseaux, certes privilégiée par le département, n'est que l'un de ses domaines d'applications. Elle a su développer des résultats visibles dans d'autres domaines, tels que le transport intelligent, l'ingénierie de procédés chimiques, etc. (cf. site web de l'équipe : <http://optimist.loria.fr/> et le *portfolio D3-1* qui contient une synthèse des activités d'OPTIMIST pour 2016-2020).

## 2. Domaine 3 : Production scientifique

### 2.1. Référence 1 : La production scientifique de l'équipe satisfait à des critères de qualité.

#### 2.1.1 Synopsis

L'Université de Lorraine a demandé aux laboratoires de rédiger pour juin 2021 les bilans des laboratoires en vu de l'évaluation HCERES 2016-2020. Ce document est présenté dans le Portfolio D3-1, et nous y référençons régulièrement dans le présent document. Pour faciliter la lecture des évaluateurs, nous avons extrait des éléments de notre rapport 2016-2020 pour les reproduire ici ; nous les avons cependant laissé en anglais, ce qui explique le mélange de langues dans ce présent document. Il est à noter que des éléments issus du bilan 2021 sont inclus dans ce présent document.

#### 2.1.2 Composition

Le département 3 (Réseaux, Systèmes et Services) est composé (en fin 2021) de 29 enseignants-chercheurs et chercheurs permanents (10 PR, 16 MCF, 3 CR) et d'une cinquantaine de non permanents dont 25 doctorants ; voir portfolio D3-1 pour les détails sur l'évolution des effectifs (2016-2021).

Le département est structuré en 4 équipes :

**COAST** Web scale trustworthy collaborative service systems, EPC Inria.

**OPTIMIST** Optimization methods for integrated systems.

**RESIST** Resilience and elasticity for security and scalability of dynamic networked systems, EPC Inria.

**SIMBIOT** Simulating and building IoT.

#### 2.1.3 Research topics

[Extrait du Portfolio D3-1, Section 2.]

The research topics of Department 3 cover web- and cloud-based distributed collaborative systems, operational research and optimization, networks and IoT monitoring and management, networked and embedded cyber-physical systems. The main goals include providing performant and trustworthy distributed collaborative systems, solving NP-hard problems raised by real-world complex applications, ensuring cyber-security and scalability of large-scale networks and systems, guaranteeing the quality of service and dependability in IoT and cyber-physical systems.

In brief, the four teams of Department 3 have produced important results published in high ranking conferences and journals of their respective research topics. Their specificity and visibility can be further characterized as following :

- COAST has extensively contributed to the understanding of decentralized collaborative services, especially with its highly visible results on CRDT (Commutative Replicated Data Type). In addition, the team has also a very good relationship with the software industry thanks to its recognized expertise on service composition and orchestration (attested by its 1M euros OpenPaaS research project, among others).
- OPTIMIST, with its strong expertise on complex system modeling and optimization methods, has attracted a high number of collaborative research projects in a broad spectrum of application domains (e.g., transportation, computer networks, energy). With only a

small number of permanent staffs (3, then 4), the team has also produced a high number of journal publications.

- RESIST team is particularly visible at the international level in the network monitoring and management community where it takes leadership. It has developed important results on several hot topics (e.g. SDN-based new network management approaches, Machine learning for network traffic analysis with a strong focus on network security issues). Its visibility is also demonstrated by its high number of H2020 and ANR projects and strong industrial collaborations.
- SIMBIOT has developed cross-topic expertises that allowed the team to efficiently deal with the complexity of the cyber-physical systems. In particular the team is known for its recognized expertise on UAV services and communication, on the quality of service in industrial IoT protocols, and on the co-simulation framework with its associated Mecsyo software.

In what follows, we present in more detail the research topics and main goals of each team.

COAST's scientific foundations are grounded on distributed collaborative systems supported by sophisticated data sharing mechanisms and on service oriented computing with an emphasis on distributed orchestration and on non-functional properties.

Distributed collaborative systems enable distributed group work supported by computer technologies. Designing such systems requires an expertise in distributed systems and in computer-supported collaborative work research areas. Besides theoretical and technical aspects of distributed systems, the design of distributed collaborative systems must take into account the human factor to offer solutions suitable for users and groups.

The COAST team investigates the issues related to the management of distributed shared data and coordination between users and groups, moving away from a centralized authority based collaboration. From a service computing perspective, it means being able to orchestrate applications made of services provided by different actors while ensuring a service level agreement at an optimal cost. While the number of actors grows, it becomes difficult to control every interaction. It becomes necessary to rely on trust among these actors to design effective and usable applications. The design of distributed collaborative systems requires trust models, based on users and system behavior. These models are the foundations to help users to make decisions about sharing information or allowing access to large group of participants in a collaboration.

OPTIMIST focuses on modeling and solving complex and combinatorial optimization problems with the central issue of resource allocation. The team is essentially interested in real-world applications requiring high performance in the fields of transportation and mobility, routing and scheduling, energy and smart grid, telecommunication networks and process engineering. The underlying problems are often NP-hard, and the team has to resort to design efficient algorithms including dominance properties, constraint satisfaction, approximation scheme, decomposition, heuristics and metaheuristics.

RESIST aims at designing, implementing and validating novel models, algorithms and tools to go towards elastic and resilient networked systems so as to enhance their scalability and security, assuming users, applications and devices whose volume and heterogeneity will continue to increase.

Softwareization of networks and data analytics are key enablers for designing intelligent methods to orchestrate – i.e. configure in a synchronized and distributed manner – both network

and system resources. Intelligent orchestration leverages data analytics for decision-making. Input data reflecting the past and current states of the system can be used to extract relevant knowledge including future states. Two approaches are pursued to generate knowledge and to validate orchestration decisions. First, a running system is monitored *in vivo*. Second, *in vitro* experimentation in controlled environments (simulators, emulators and experimental platforms) allows us to reproduce a running system with a high accuracy and under different hypotheses. Accordingly, the research activities are structured in four main axes : Monitoring, Experimentation, Analytics and Orchestration.

The goal of SIMBIOT is the design and validation of “smart” Cyber-Physical systems, with a focus on the adaptability properties of such systems in terms of calculations and communications, in order to increase their autonomy. The research program is divided into 3 axes : 1) Abstractions and architectures for multi-modeling, modular design, design and validation of cyber-physical systems ; 2) Efficient distributed computing algorithms in cyber-physical systems ; 3) Communications architectures, protocols and Quality of Service (QoS) enhancement to support real-time interactions in cyber-physical systems. For each scientific challenge, the validation is carried out, among other things, by co-simulation and in-situ experimentation, this constituting an orthogonal challenge to the three previous axes.

#### 2.1.4 Main Results

Major results can be found in portfolio D3-1 Section 3, and in each team’s report. Instead of giving a long list of them or a hardly understandable abstract of them, we choose here to highlight some representative results on one selected topic per team.

**Optimistic replication algorithms and group awareness for distributed collaborative editing** In order to provide efficient data availability, data is typically replicated and users are allowed to concurrently modify replicated data. In the context of massive updates (e.g. wikis with large amounts of contributors and a high frequency of changes), one of the challenges is to develop optimistic replication algorithms that maintain consistency of the shared data under concurrent modifications. A second challenge is to provide group awareness that helps users track the changes that other collaborators have made to shared data and avoid potential conflicts or redundant work.

The **COAST** team has long experience and recognized expertise on CRDT (Commutative Replicated Data Type) that is widely used as data structure for synchronisation of replicated data.

The team designed new optimistic replication algorithms for rich content wikis allowing real-time collaboration and automatic merging [71]. The proposed merging solution is based on an operational transformation approach for which we defined operations with a high-level semantic capturing user intentions when editing wiki content such as move, merge and split. *Our solution is the first one that deals with high level operations, while existing approaches are limited to operations of insert, delete and update on textual documents.*

For further improving the existing CRDT-based solutions, three additional new results were obtained. The first is a selective undo mechanism that relies on an abstraction capturing the semantics of concurrent undo and redo operations through equivalence classes [281]. The second result is a CRDT for sequences which embeds a renaming mechanism [396] where elements are reassigned shorter identifiers in an uncoordinated manner. Experimental results demonstrate that this mechanism decreases the overhead of the replicated data structure. The third result is the design of a CRDT for relational databases [298].

For experimenting CRDT algorithms without suffering from the bias or limitations of the existing systems, the team also designed and developed MUTE (Multi-User Text Editor) [360], a peer-to-peer web-based real-time collaborative editor (<https://github.com/coast-team/mute/>) where users share their data with the collaborators they trust without having to store their data on a central place. MUTE features high scalability and supports offline collaboration. It relies on LogootSplit<sup>1</sup>, a CRDT-based consistency maintenance algorithm for strings that can be seen as an extension of Logoot CRDT algorithm for unit elements (e.g. characters). It also includes now an additional algorithm for strings based on the RGA algorithm [177]. MUTE is provided as a free software under GNU Affero General Public License.

Our proposed algorithms have also been evaluated in large scale settings and compared to popular real-time collaborative editing systems such as GoogleDocs and Etherpad [330].

In addition, we also studied the management and the resolution of conflicts based on collaboration traces of source code developed using version control systems such as Git and textual documents obtained using real-time editors such as ShareLatex/Overleaf [355, 96, 394].

Our studies revealed importance of awareness mechanisms in collaborative systems. We therefore studied the balance between disturbance and awareness of concurrent updates and proposed a solution allowing users to define focus regions without being disturbed by work of other users [365].

The important part of the above mentioned results have been published in top level journals and conferences of the domain, such as : Concurrency and Computation : Practice and Experience [71], Computer Supported Cooperative Work [96], Group [177], ECSCW [96], OPODIS [281].

**Optimization in transportation : Electric vehicle routing, charging and mobility on demand** The **OPTIMIST** team has produced important scientific contributions by dealing with divers application domains (refer to the team report). We choose here to highlight some significant results on the transportation related systems.

*The research work of OPTIMIST on the vehicle routing problems (VRP) with in particular electric vehicles (EV) is among the first works in the literature.* For instance, in [76] we considered the Electric Vehicle Scheduling and Optimal Charging Problem. We discussed the NP-hardness of the problem and provided two heuristics approaches. We also considered the periodic VRP with electric vehicles in [236, 451, 452] in which a planning horizon of several periods is considered. The objective is to minimize the total cost of routing and charging over the time horizon. We proposed a constructive heuristics [236] and metaheuristics (LNS and ALNS) [264, 451, 452]. We have also integrated constraints to take into account ecological aspects such as the pooling of the transfer sites and the pickups and deliveries [65, 212], and the profit per customer in the case of limited resources [84, 229, 448]. In [84], we have proposed an extension of ALNS that is competitive with the literature.

In contrast to the problems of routing, where mainly goods are transported, in mobility problems we are interested in the transportation of persons, and the allocation of resources for user demands. In the literature this problem is called dial-a-ride problem (DARP). *The majority of the literature focuses on the static problem, where all transport requests are known in advance. However, in practice the requests of users arrive progressively and the challenge here is to provide efficient and fast (less than 2 seconds) methods for inserting user requests into*

---

1. Luc ANDRÉ, Stéphane MARTIN, Gérald OSTER et Claudia-Lavinia IGNAT. “Supporting Adaptable Granularity of Changes for Massive-scale Collaborative Editing”. In : *CollaborateCom - 9th IEEE International Conference on Collaborative Computing : Networking, Applications and Worksharing - 2013*. Austin, United States, octobre 2013.

*the current vehicle routes.* In [444] we developed an efficient two-phase procedure containing an insertion heuristic and an ALNS algorithm. In [456, 145] we improved our approach by an online reinsertion algorithm based on destroy/repair operators to reinsert requests rejected by the online algorithm. *This research theme is based on collaborations with companies (Padam, Covivo) with our results partially integrated in the operational industrial tools.*

The problem of energy management between the electric network and vehicle recharging has led to the emergence of new combinatorial optimization problems. These problems require the development of efficient algorithms to take into account the technical and technological constraints of the vehicles and the electric network.

In [76] we have developed an exact EV recharging algorithm based on the formulation of min-cost flow problem. In [459] we considered the EV charging scheduling problem where EV arrive at random unknown instants. We considered single-phase charging EV in a three-phase charging station. The objective is to build a real-time schedule that minimizes the total tardiness subject to the technical constraints of the charging station. We proposed heuristics based on the priority rule. While in [449] we studied the optimization of bus charging while complying with technical constraints. We developed a decomposition-based heuristic approach.

The above results have made OPTIMIST as a recognized expert on electric vehicle routing, allocation and charging optimization. This has also led to strong collaborations with industrial partners.

In addition, part of those results have been published in high ranking journals and conferences of the domain, such as : International Journal of Production Research [76], International Conference on Computational Science and Its Applications [459], International Conference on Computational Logistics [449, 452].

**Monitoring programmable networks and encrypted traffic based on SDN, fog/edge and crowdsensing** The **RESIST** team has produced significant results (refer to team report) in its four research axes : monitoring, analytics, orchestration and experimentation. We choose here to highlight some main achievements in its network monitoring and management related topics.

Internet ecosystem is fast evolving, introducing more security and flexibility. This calls for developing new algorithms and frameworks, aiming to monitor SDN-based programmable networks and encrypted traffic, by using new network components like fog/edge and mobile devices, and including crowdsensing-based analysis methods.

#### *Programmable Network Monitoring.*

SDN-based monitoring allows us to gather more valuable indicators by specifying or programming monitoring tasks with a fine granularity [464]. Adding stateful monitoring capacity is a major goal the community aims at. We proposed to use eBPF (extended Berkeley Packet Filter) to apply finer filtering in comparison to OpenFlow. Our proposal guarantees *line-rate operations* and safety requirements even when programs are deployed on running network switches. We have integrated our solution within the regular packet processing pipeline of Open vSwitch, a major open-source software switch for OpenFlow, by extending the cache mechanisms. This work has been published in SOSR, the ACM flagship conference on SDN [228]. We also proposed a method to map Extended Finite State Machine (EFSM) models into a P4 switch to embed detection of complex behaviors within the dataplane. We demonstrated its effectiveness and efficiency against TCP protocol attacks [294, 154].

#### *Encrypted Traffic Monitoring.*

While preserving user privacy is important thanks to encrypted communications, monitoring, detecting and mitigating forbidden user actions are also needed to be compliant with security policy. To deal with this antagonism, we proposed a new passive and transparent method to infer user actions over HTTPS services (e.g. keywords used in a search engine) by extracting and interpreting only meaningful meta-data derived from the encrypted traffic. We assessed this approach on the Google Images Service although our approach is valid for other services [227]. We have not only designed a classifier for the HTTP/1.1 protocol but also a classifier taking into account the specificities of the HTTP/2 protocol.

To the best of our knowledge, *we were the first to propose an approach for monitoring encrypted HTTP/2 traffic*. An in-depth analysis of this work appeared in the reference journal of network management, IEEE TNSM [112].

#### *Fog/Edge-based monitoring*

By relying on small sized and geo-distributed infrastructures, the edge computing paradigm aims at supporting low latency and high bandwidth requirements of next generation services.

After reviewing existing solutions [199], we found that most proposals did not allow a fine grained decomposition of services in fog/edge computing. In particular, we investigated monitoring functions in [175]. To reduce as much as possible the footprint of the whole monitoring service, we proposed to mutualize identical processing functions among different tenants while ensuring their quality-of-service (QoS) expectations. To the best of our knowledge, *this is the first attempt to formally define the mutualized (monitoring) functions placement problem* in a multi-tenant environment since related works always consider identical flows (for example for Service Function Chaining).

#### *Crowdsensing-based Monitoring.*

While data anonymization for mobile crowdsourcing is commonly achieved a posteriori on the server side, we have proposed, in collaboration with the Inria Spirals team (Inria/Université de Lille), a decentralized approach named Fougere[268], which introduces an a priori data anonymization process resilient to location-based attacks. This work received the best paper award at DAIS'19. In collaboration with social science researchers, we performed an exploratory smartphone usage study with logs collected from users in the wild, combined with the socio-demographic, technological and cultural information provided by them. We found significant correlations between service usage and socio-demographic profiles and showed how sociological information can be used to renew the official statistics and to recommend suitable applications to potential users [193].

Part of the above results are published in the top-level journals and conferences of the domain, such as : ACM Symposium on SDN Research (SOSR) [228], IEEE TNSM [294], [112], International Conference on Network and Service Management (CNSM) [227], IEEE Conference on Network Softwarization (NetSoft) [464].

In addition to the scientific value, these results have also led to strong industrial impact (e.g., implementation on open vSwitch and P4) as well as cross-disciplinary collaborations with social scientists (e.g., crowdsensing).

**Design and evaluation of smart cyber-physical systems** The **SIMBIOT** team has produced important results (refer to team report for more detail) on smart CPS design and evaluation related topics.

Smart CPS (e.g., smart grid, autonomous collaborative drones and vehicles, etc.) combine

physical, human, and computer elements with close interactions through high performance networks. Their complexity, the multiplication of the possibilities they offer and the risks they present, bring to light new challenges that are at the heart of our research work.

One important result is the design of a CPS specification language dedicated to autonomous *UAV-based cyber-physical systems* specification and programming that meet the safety requirement [279, 458]. This language has been applied to UAV based monitoring solutions for OIV (Opérateurs d'Intérêt Vital) infrastructures within CEOS FUI project. This *UAV-based CPS safety* issue has also been addressed in collaboration with CRAN for fault tolerance in flocks and drones in formation within one co-supervised PhD work [322, 204, 356, 82, 110, 283]. As a CPS goes beyond the computing component, this UAV safety issue has also been addressed by a hybrid smart parachute (HSP) [178] which was then developed as a SATT project by extending our approaches towards general UAVs safety [179].

As UAV-based and more generally robot-based CPS are becoming more and more heterogeneous and using divers IoT communication protocols, maintaining the quality and trust constraints of the communication networking , as well as taking into account energy constraints and optimisation are also challenging issues that we have successfully addressed [64, 90, 98, 120, 123, 124, 126, 139, 141, 143, 153, 309, 403, 158].

Our results on the *UAV-based CPS* have allowed us to be involved in several additional projects : 1) Interreg Grone project for UAV-based services (2017-2020), where an original nomadic and accurate positioning system has been proposed [257] together with a patent FR2111970 deposited in 2021 [466]. 2) ANR Biofly rapid project for designing framework for UAV aiming with the optimal components (software and hardware) and in particularly biomimetic drones (2019-2021). 3) ANR CONCERTO on controlled mobility for UAVs (2020-2023).

A second major result is obtained on the *CPS modeling and co-simulation*, with a focus on smart grid. Most modeling and simulation (M&S) questions about cyber-physical systems (CPS) require expert skills belonging to different scientific fields. The challenges are then to rigorously integrate each domain's tools (formalism and simulation software) within the rigorous framework of M&S process. Co-simulation is the way we adopted. For that, we proposed : 1) the specifications in DEVS formalism of a co-simulation framework which enables to interconnect several pre-existing and heterogeneous M&S tools [83], 2) DEVS wrapping of several models/simulators (IP network with NS3 and Omnet++ simulators integration [14], IEC61850 standard with Omnet++, FMI Standard, Matlab, Netlogo), 3) a rigorous model and simulator integration approach with development of a DSL [26], as well as hierarchical model composition of models, methodology for the development of microgrid co-simulation, 4) Mecsyclo middleware implemented all these contributions ([www.mecsyclo.com](http://www.mecsyclo.com)) and was successfully applied for co-simulation of cyber-physical energy systems (smart-grid with EDF R&D, hydrogen microgrids in LUE IMPACT ULhys project, real-time industrial IoT with SCLE-SFE company, thermal renovation with APHEEN student residence). Moreoever, Mecsyclo has been selected as one of the software used in "Chaire Territoire Industrie et energie" project.

Some of the above results are either published in high ranking journals (e.g., IEEE Trans. on Aerospace and Electronic Systems [110], IEEE Trans. on Intelligent Transportation Systems, [126], Computer networks [143], EEE internet of things [98], IEEE TII [123]) or have led to industrial impacts.

### 2.1.5 Scientific production and quality

During the evaluation period of 2016-2021, Department 3 has produced 43 PhD thesis, 2 HDR, 99 journal papers and 138 conference papers in major venues, and 2 patents (one deposited and one in pending for startup creation). In terms of the quality of the publication supports, we

give below the list of top journals and conferences.

**List of top journals in which we have published** IEEE Transactions on Network and Service Management (4) [75, 112, 152, 154], IEEE Communications Magazine (3) [99, 115, 155], Computer Networks (2) [91, 143], Annals of Operations Research (2) [55, 122], International Journal of Production Research (2) [73, 76], Computer Communications (2) [56, 151], Computer In Industry (1) [106], ACM Transactions on Internet Technology (1) [116], Concurrency and Computation : Practice and Experience (1) [71], Computer Supported Cooperative Work (1) [96], Journal of Membrane Science (1) [100], Computers and Operations Research (1) [156], IEEE Transactions on Information Forensics and Security (1) [125], IEEE Communications Surveys and Tutorials, (1) [150], IEEE internet of things journal (1) [98], IEEE Transactions on Industrial Informatics (1) [123], IEEE Transactions on Mobile Computing (1) [124], Episteme (1) [117], IEEE Transactions on Intelligent Transportation Systems (1) [126].

*Remark 1 : About 28% (28/99) of the papers of Department 3 have been published in these journals.*

*Remark 2 : These journals are considered as top journals regarding their reputation and some ranking algorithms. However, some papers published in other venues with a lesser ranking have more citations than papers published in these journals, proving their interest for our peers. The comment is valid regarding conferences as well.*

**List of top conferences in which we have published** IEEE/IFIP Network Operations and Management Symposium (NOMS) (8) [197, 230, 231, 235, 240, 242, 249, 250], IFIP/IEEE Symposium on Integrated Network and Service Management (IM) (8) [218, 259, 267, 274, 306, 307, 308, 310], International Conference on Network and Service Management (CNSM) (5) [190, 226, 227, 303, 307], IEEE Conference on Network Softwarization (NetSoft) (5) [185, 420, 464, 222, 255], IEEE IWCNC (4) [254, 276, 277, 299], IEEE Conference on Local Computer Networks (3) [224, 262, 288], ACM Conference on Information-Centric Networking (3) [463, 189, 241], CIC (3) [182, 208, 232], CoopIS (2) [194, 247], International Conference on Computational Logistics - ICCL (2) [449, 452], BPM (1) [221], ICSOC (1) [248], Group (1) [177], TrustCom (1) [181], SMDS, IEEE World Congress on Services (1) [298], OPODIS(1) [281], DBSec (1) [243], ECSCW (1) [96], OpenSym (1) [207], JCDL (1) [183], International Conference on Computational Science and Its Applications - ICCSA (1) [459], European Conference on Evolutionary Computation in Combinatorial Optimisation - EVO COP (Part of EvoStar) (1) [450], IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGRID) (1) [195], ACM Symposium on SDN Research (SOSR) (1) [228].

*Remark 1 : About 39% (54/138) of the papers of Department 3 have been published in these conferences.*

*Remark 2 : In the rapid evolving Web and Cloud domains, for timely reporting the latest findings, researchers are used to privilege conferences than journals. This explains the high number of conference papers compared to the journal papers.*

**Software** Department 3 has produced 21 software. We just highlight some of them. Please refer to the portfolio D3-1 and the teams' reports therein for further information.

**AntsRoute** has been developed by OPTIMIST team as an optimization engine for electric vehicle routing integrating electric vehicles recharging. An exclusive license is granted to the startup Antsway (<https://antsroute.com>), created by OPTIMIST.

**DISTEM** (<https://distem.gitlabpages.inria.fr/index.html>), developed by RESIST team, is a distributed systems emulator, targeting HPC, Cloud and Big Data experimentation. It is largely used by Grid'5000 community.

**GoMaCH**, developed by SIMBIOT team, is the most advanced traffic adaptive multi-channel MAC protocol for IoT [224]. GoMaCH has been implemented as open source code, available on the RIOT OS platform (<https://github.com/RIOT-OS/RIOT/pull/5618>).

**MECSYCO** (Multi-agent Environment for Complex System CO-simulation), developed by SIMBIOT team, is a co-simulation software available on <http://www.mecsyco.com/> and distributed under AGPL licence.

**MIND** is another software developed by OPTIMIST in collaboration with LRGP (UMR7274). It allows to the synthesis and optimization of gas separation processes by membranes, where quality constraints on the process, and economical/physical data can be provided by the user to customize the final solution. A first version was registered under APP (IDDN.FR.001.460015.000.S.A.2018.000.31500).

**MUTE** (Multi-User Text Editor) is a collaborative web-based text editing tool developed by COAST team that implements several advanced replication algorithms (<https://github.com/coast-team/mute/>). It is under AGPL-3.0 License, and has 79 github stars.

**SCUBA** (<https://scuba.gitlabpages.inria.fr/docs/>) [465, 174], developed by RESIST team, is a tool suite to automate the security assessment of industrial and general public IoT devices. It allowed to prepare the creation in 2022 of the startup CybAI (<https://www.loria.fr/fr/la-startup-cybai-presente-scuba/>).

## 2.1.6 Academic reputation and appeal

**Prix et distinctions.** Department 3 has won 4 best paper awards at NTMS2016 [198], IM2017 [354], DAIS2019 [268], and CNSM2021 [307]. The following members of Department 3 have received distinctions : Raouf Boutaba is 2019 Fellow of the Royal Society of Canada (FRSC), Raouf Boutaba is the recipient of the Technical Achievement Award of the IEEE Communications Society Technical Committee on Information Infrastructure and Networking (2016), Raouf Boutaba is the recipient of the 2016 Donald W. McLellan Meritorious Service Award of the IEEE Communications Society (2016), O. Festor has received the *Dan Stokesberry award* (2019), J. François has received the *IEEE Young Professional in Network and Service Management award* (2019), Enrico Natalizio was distinguished TPC member of IEEE INFOCOM in 2019 and 2020.

**Invitations et visites.** Department members were invited speakers at 61 international and national events (refer to portfolio D3-1 for details).

There were in total 21 stays (visits) outside. F. Charoy, C. Ignat and G. Oster visited the Department of Computer Science & Knoesis, Wright State University in 2016 and 2017 for one month each. B. Linot spent 3 months at Wright State University in 2019 funded by her LUE grant. M. Nicolas spent 2 months at Baltic University in 2019. F. Charoy visited the SOC Team at UNSW Australia in september 2017. F. Charoy visited for two month IBM Research Almaden and for 6 weeks Penn State University in 2019 as part of a sabbatical. B. Addis has stayed 2 weeks in 2018 in Politecnico di Milano and Università di Rome “Tor Vergata” (Italy). A. Oulamara spent 4 months at the University of Kent at Canterbury, UK, in 2020. As part of RESIST Inria international associate team NETMSS with University of Waterloo (2018 - 2020), 7 short visits (between 1 and 3 weeks) at University of Waterloo have been realized. L. Ciarletta was invited at Georgia Tech, Atlanta for 2 weeks in 2017 which resulted in an invention deposit ”Maneuver Regulation for Accelerating Bodies in Atmospheric Conditions” at the National Science Foundation in the USA. V. Chevrier was invited for one week at Kiev University (KPI) in 2017. T. Paris stayed for two weeks in EPFL, Lausanne in 2020.

**Projets et contrats.** External fundings occupy the largest part of the total fundings of Department 3. The department has obtained 10 European and INTERREG projects, 3 other in-

ternational projects, 13 national projects (ANR, FUI, ...), 16 regional projects, 3 PIA projects, 8 contracts with companies and 13 CIFRE contracts.

Refer to portfolio D3-1 Section 8 for the list of projects during 2016-2020. In 2021, we obtained H2020 AI@EDGE (01.2021-12.2023), amSud ANGEL (01.2021-12.2022), ANR Grifin (2021-2024), and one industrial contract with Fair & Smart company (2020-2024).

## **Editorial and organizational activities.**

### *Program and Paper Committees.*

The department members participated for more than 200 times to the TPCs of the major conferences of our domains. In particular : BPMDS, EDOC, ICSOC, IEEE CLOUD Computing, ICWS, SCC, WISE, CHI, CSCW, ICSOC workshop CoopIS, ICORES Algotel, ROADEF CNSM, NOMS, IM, NetSoft, Networking, RTNS, WFCS, ICUAS, INFOCOM, GLOBECOM, ICC, SECON, MASS.

### *Editorial responsibilities.*

The department members were/are editors or associate editors of 16 journals : IEEE Transactions on Service Computing, International Journal of Services Computing, International Journal of Next Generation Computing, Journal of CSCW (Computer Supported Cooperative Work), Service Oriented Computing and Applications Journal (Springer), Wiley International Journal of Network Management, IEEE Transactions on Network and Service Management, Springer Journal of Network and System Management, IEEE Journal on Selected Areas in Communications, Elsevier Vehicular Communications, Elsevier Computers and Electrical Engineering, Elsevier Computer Networks, Springer Real-time systems, Elsevier Ad Hoc Networks, Annals of Telecommunications, Elsevier Digital and Communication Networks.

### *Steering committees and conference TPC chairs/co-chairs.*

Co-chairs of the Program Committee of ECSCW 2018, General co-chairs of ECSCW 2018. Workshops & Masterclasses Co-Chair at ECSCW 2021, co-chair of the Demo and Poster Program Committee of ECSCW 2018, co-chair of the PhD Forum for ICSOC 2016, Steering committee members of European Society for Socially Embedded Technologies (EUSSET). NOMS2016 experience Track co-chair and workshops co-chair, NOMS2020 experience co-chair and tutorial co-chair, NOMS2018 demonstration co-chair, MANIFI2016, AIMS2016, 2018, ANNENET2017, 2018, 2020 general chair, IM2019 experience track co-chair, tutorial chair, and the workshop HotNSM, CNSM2016, 2019, DISSECT2017, 2018, 2019, 2020 general co-chair, iOP2016, TMA2019, NETSOFT2016 tutorial co-chair, 2018 demonstrations co-chair, 2018 workshops co-chair, 2019 workshops co-chair, manTwoblock2018, ETSN2018, 2019, ICBC2019 demonstration co-chair, CLOUDNET2020 keynote co-chair, BRAINS2020, MSN2020 track co-chair, NETWORKING2020 demo track co-chair, IM2021 general co-chair, BRAINS2021 general co-chair, RTNS2019 TPC co-chair.

### *Conference and Workshop organizations.*

The members of the department have also been involved in the following organization committees of conferences/workshops, such as : Fifteenth International Workshop on Collaborative Editing Systems in conjunction with CSCW 2017, ECSCW (European Conference on Computer-Supported Cooperative Work : The International venue on Practice-centred computing and the Design of cooperation technologies) 2018 In Nancy, Workshop on Social science insights for large scale and mobile collaboration/networks at LORIA Nancy in 2017, SDN DAY 2016 - Optimisation et algorithmes pour les réseaux SDN, NETSOFT2016 publications Co-Chairs, 2019 web chair, CNSM2016 publicity co-chair, IM2017 registration co-chair, 2019 publications co-chair, NOF2018 publicity co-chair, NETWORKING2020 publicity co-chair and patrons co-chair, NOMS2020 publication co-chair and publicity co-chair, RESSI'2018 organizing committee, REP-PAR2017, Grid'5000/FIT School 2018, TILECS workshop 2019, ETR2017, ETR2021 (Real-time

summer school), RESCOM summer school 2019, Forum FCH-Entreprises (2016, 2018, 2020), Journées scientifiques FCH (Federation Charles Hermite).

### **Services as expert or evaluator.**

*Thesis and habilitation committees, Hiring committees.*

Members of the department participated to hundreds of PhD defense committees (see [www.theses.fr](http://www.theses.fr) for each member's participations) They have also involved in various Universities, INRIA and CNRS hiring committees. Refer to portfolio D3-1, team reports.

### *Non-local scientific responsibilities.*

Several members of the department have been or are involved at national level in : 1 CNU section 27 (F. Charoy, member and assessor), 1 CoNRS section 06 (Y.Q. Song, member), 1 ANR committee (A. Oulamara, CES 22), 7 HCERES evaluation committees.

Moreover they ensured/ensure the following national and international level scientific responsibilities : I. Chrisment is Deputy Scientific Director at INRIA, in charge of the national domain of "Networks, Systems and Services, Distributed Computing", J. François (IRTF NRMG) and R. Badonnel (IFIP WG 6.6) are chair and co-chair in standardization and research organization.

Following members served/serve as experts at national and international levels : O. Festor is a member of Scientific Councils of Orange , I. Chrisment is a member of Scientific Councils of AFNIC, Enrico Natalizio was evaluator for American NSF proposals in 2020 and for ERC Consolidator grant proposals in 2018 and 2019, C. Ignat is member of the Inria Evaluation Committee and CRCN recruitment juries (Nancy, Saclay, Paris, Rennes, Grenoble), S. Contassot-Vivier was expert until 2020 for the French Ministry of Research for evaluating international collaboration proposals (DGRI-MEI), S. Contassot-Vivier was expert for the University of Bourgogne Franche-Comté to evaluate the ability of non-French applicants to university positions, to evaluate internal projects, Y.Q. Song was expert for "fonds de recherche nature et technologies de Québec" 2018, V. Chevrier was expert for Swiss National Science Foundation in 2016, for "Cross Disciplinary Program" of IDEX Université Grenoble Alpes in 2018..

### *Local scientific responsibilities.*

O. Perrin was the head of the doctoral committee in computer science of the doctoral school IAEM until 2020, F. Charoy is the head of the doctoral committee in computer science of the doctoral school IAEM since 2021.

## **2.1.7 Life of the department**

**Seminars :** Department 3 has organized 33 department seminars and 4 department PhD days during the evaluation period. The research activities are essentially carried out at each team level, with their own team meetings on specific research topics. The department seminars are mainly invited talks, either from reputed researchers (e.g., A. Sheth in 2016, N. Asokan in 2017, I. Akyildiz in 2019) or external candidats to different academic opening positions (PR, MCF, CR). The department PhD days (open to all the lab), where all PhD students present the positioning of their research problems, their original approaches and their achievements, provide an excellent occasion to get a snapshot of the up-to-date research topics in the department.

**Governance :** The department manages opening faculty positions' profile proposals, PhD subject/candidate selection for then competing the university PhD grants (UL doctoral contracts) at the lab level, and the attribution of master level internship grants. They are processed with permanent staff meetings.

**Recruitments :** The number of the department permanent members has kept in total stable (28 in 2016, 29 in 2021). There were 4 departures, with 3 new recruitments (1 PR in 2018, 1 MCF and 1 CR Inria in 2021). Three others colleagues have integrated our department from Metz.

### 2.1.8 Long-term academic relations

We have developed fruitful collaborations with numerous international partners. In particular, we have collaborated with : The Arctic University of Norway, Wright State University (with an Inria associate team), IBM Research Almaden, Politecnico di Milano, University of Kent, Université du Québec, Ghent University, University of Chicago, University of Luxembourg (with an Inria associated team), International University of Rabat (with a CNRS LIA), Bundeswehr University of Munich, University of Waterloo (with an Inria associate team, and Inria international chair and Professo@UL), University of Yaounde (with an Inria associate team), SupCom Tunis, Zhejiang University, Military Academy of Tunisia, University of Abomé Calavi.

We have also long term collaborations at the national and local levels (Refer to portfolio D3-1, section 12, for more detail and co-signed publications).

## 2.2. Référence 2 : La production scientifique est proportionnée au potentiel de recherche de l'équipe et répartie entre ses personnels

**Homogénéité de la production scientifique entre les permanents.** Voir DAE labo.

**Accompagnement des jeunes chercheurs.** Voir DAE labo.

**Accompagnement des chercheurs qui reprennent l'activité recherche.** Voir DAE labo.

**Production scientifique des doctorants.** 3.3 publications per PhD student in average, with a strong involvement in the experimental platform based validation and software development.

## 3. Domaine 4 : Inscription des activités de recherche dans la société

### 3.1. Référence 1 : L'équipe se distingue par la qualité de ses interactions non-académiques

Department 3 maintains a particularly strong link with industrial and economic partners. In particular, we had a high number of CIFRE contracts (13) with industrial partners : Orange (3) and Thales (3), Bonitasoft (1), Open (1), Antsway (1), Padem (1), SCLE-SFE (ENGIE group) (1), Xilopix/Qwant (1), Numeryx (1).

Besides the CIFRE contracts, we have also collaborated with industrial partners through 7 bilateral contracts. Open Group contract to work on Cloudware service composition (2016–2019 - 237k euros). Industrial project with RATP (2018–2019, 86 k euros). *Routing and scheduling of electric bus.* PGMO 2018 (Fondation Mathématique Jacques Hadamard, 10 k euros). IMPRESS the Impact of optiMization in PRocESS Synthesis - Projet (with EDF). Red Alert Labs (2018, 7.5k euros), An extension of the SCUBA tool suite was developed to verify the security requirements provided in Common Criteria format by the industrial partner. FPC Ingénierie (2017, 30k

euros), Development of a dedicated monitoring probe for SCADA systems using process mining techniques. MS4SG (Multi-Simulation for Smart Grid), contract with EDF R& D (2013 -2016, 400 k euros). Mecsycro-NG (mecsycro new generation), contract with EDF R& D(2016-2017, 140 k euros).

In addition we highlight our intensive transfer activities with 4 projects supported by the SATT Grand Est region : BlueRoute for developing optimization software for electric cars sharing, MIND for membrane optimization software, Hybrid Smart Parachute on UAVs safety and Starburst on serious gaming platforms.

The department keeps a close link with its startups : Antsway (CIFRE PhD), Alerion (partner of FUI Ceos, Interreg Grone, ANR Concerto). It is also preparing the creation of CybAI startup on IoT security, based on SCUBA patent.

Finally we keep sustainable relationships with Bonitasoft that has integrated the results of COAST team into its BMPaaS solution.

### 3.2. Référence 2 : L'équipe développe des produits à destination du monde socio-économique

We can highlight the intensive transfer activities with 4 projects supported by the SATT Grand Est region : BlueRoute for developing optimization software for electric vehicles sharing, MIND for membrane optimization software, Hybrid Smart Parachute on UAVs safety, and Starburst on serious gaming platforms.

The department keeps a close link with its startups through either exclusive license transfer or continuous research supports : Antsway (CIFRE PhD), Alerion (partner of FUI Ceos, Interreg Grone, ANR Concerto). It is also preparing the creation in 2022 of the startup CybAI (<https://www.loria.fr/fr/la-startup-cybai-presente-scuba/>), based on SCUBA patent.

RESIST team is strongly involved in Inria-Orange joint laboratory.

Finally we keep sustainable relationship with our traditional partners like Bonitasoft that has integrated the results of COAST team into its BMPaaS solution.

### 3.3. Référence 3 : L'équipe partage ses connaissances avec le grand public et intervient dans des débats de société

As most of the department members are faculties, they heavily involve in their teaching and management activities.

Beyond the traditional teaching activity, we have developed 6 MOOCs, some are used by training tens thousands of students over the world. For instance : *Network Management*, the ANR FLIRT Project MOOC has a total of 16700 subscriptions from 77 countries, the MOOC "Internet and Networks" has registered a total of 18430 subscriptions since January 2019, the MOOC "Build Your First Android Application" integrated in Coursera has registered 330000 students, the MOOC "Sécurité des Réseaux Informatiques" has over 5700 registered users from November to December 2021.

In addition, at the national level, members have also strongly involved in research summer schools (GDR RSD RESCOM 2019, Ecole Temps réel, Grid'5000, ...), and in the Scientific Committee of RESSI (*Rendez-Vous de la Recherche et de l'Enseignement de la Sécurité des Systèmes d'Information*).

Members of the department also participated to different public events : "Rencontres Université Entreprise" in Paris to demonstrate the collaborative editor MUTE (<http://www.rue-aef.com>), "Rencontre Inria-Industrie" (RII) in 2016, "Forum FCH-entreprise 2016, 2018, 2020" in collaboration with the "Federation Charles Hermite" and 3 "pôles de compétitivité". Isabelle Chrsment

was in charge of the scientific part of the 4th module "connecter le réseau" in the Class'Code project <https://project.inria.fr/classcode/classcode-in-english/>, aiming at helping teachers and educators for introducing computer science to children aged from 8 to 14 years old. Rémi Badonnel participated to *Débats Grenats*, February 2018, Metz, France, a round table on the theme of security over its different forms, including risks induced by cyber-security. Lucas Nussbaum participated to *Libre sur la place* 2018 in Nancy with "Plongée au cœur des communautés, De Debian à l'Open Core". Abdelkader Lahmadi and Isabelle Chrisment provided an article entitled "Comment évaluer le niveau de sécurité de vos objets connectés ?" in Binaire, Le Monde, June 2020, <https://www.lemonde.fr/blog/binaire/2020/06/26/comment-evaluer-le-niveau-de-securite-de-vos-objets-connectes/>. Abdelkader Lahmadi contributed to an article about AI and cybersecurity, "Que peut l'IA pour la cybersécurité" in Data Analytics Post. Abdelkader Lahmadi contributed to an article entitled "Le télescope qui surveille le cyberspace", Journal Le Point, 29 July 2021.

More details can be found in Portfolio D3-1, Sections 15-18.



# Références bibliographiques du département 3

---

<b>Thèses</b>	25
<b>Habilitations à diriger des recherches</b>	27
<b>Journaux internationaux</b>	27
<b>Conférences invitées</b>	37
<b>Conférences internationales majeures</b>	38
<b>Autre conférences internationales</b>	52
<b>Journaux nationaux</b>	60
<b>Conférences nationales</b>	61
<b>Ouvrages</b>	62
<b>Ouvrages collectifs ou actes de conférence</b>	62
<b>Chapitres de livres</b>	63
<b>Médiation scientifique</b>	66
<b>Autres publications</b>	66
<b>Brevets</b>	67

---

## Thèses

- [1] Hien Thi Thu TRUONG. "A Contract-based and Trust-aware Collaboration Model". Thèse de doct. Université de Lorraine, décembre 2012. [tel-00769076](#).
- [2] Kamel AISSAT. "Optimization and integration of shared mobility in multimodal transport systems". Thèse de doct. Université de Lorraine, avril 2016. [tel-01754661](#).
- [3] Luc ANDRÉ. "Intention Preservation and Consistency Maintenance for Real-Time Replicated Data". Thèse de doct. Université de Lorraine, mai 2016. [tel-01754666](#).
- [4] Ahmed BOUCHAMI. "Security of collaborative resources in enterprises social networks". Thèse de doct. Université de Lorraine, septembre 2016. [tel-01754669](#).
- [5] Tomasz BUCHERT. "Managing large-scale, distributed systems research experiments with control-flows". Thèse de doct. Université de Lorraine, janvier 2016. [tel-01273964](#).
- [6] Anthéa MAYZAUD. "Monitoring and Security for the RPL-based Internet of Things". Thèse de doct. Université de Lorraine, octobre 2016. [tel-01528815](#).
- [7] Kévin ROUSSEL. "Evaluation and enhancement of software platforms for wireless sensor networks, to optimize quality of service and energy consumption". Thèse de doct. Université de Lorraine, juin 2016. [tel-01754653](#).
- [8] Elian AUBRY. "Routing protocol for NDN architecture". Thèse de doct. Université de Lorraine, décembre 2017. [tel-01699127](#).
- [9] Adel BELKADI. "FDI/FT Methods Design to multi-agent systems : Application to formation control of a fleet of autonomous aerial vehicles". Thèse de doct. Université de Lorraine, octobre 2017. [tel-01754768](#).

- [10] Patrick Olivier KAMGUEU. "Dynamic Configuration and Routing for the Internet of Things". Thèse de doct. Université de Lorraine, décembre 2017. [tel-01687704](#).
- [11] Jordi MARTORI ADRIAN. "Probabilistic Models of Partial Order Enforcement in Distributed Systems". Thèse de doct. Université de Lorraine, juin 2017. [tel-01649866](#).
- [12] Wazen M. SHBAIR. "Service-Level Monitoring of HTTPS Traffic". Thèse de doct. Université de Lorraine, mai 2017. [tel-01649735](#).
- [13] Evangelia TSIONTSIOU. "Multi-constrained QoS Routing and Energy Optimization for Wireless Sensor Networks". Thèse de doct. Université de Lorraine, décembre 2017. [tel-01735239](#).
- [14] Julien VAUBOURG. "Integration of IP network models to DEVS multi-models, for cyber-physical system co-simulations". Thèse de doct. Université de Lorraine, avril 2017. [tel-01647881](#).
- [15] Maxime COMPASTIÉ. "Software-defined Security for Distributed Clouds". Thèse de doct. Université de Lorraine, décembre 2018. [tel-02096145](#).
- [16] Quang-Vinh DANG. "Trust assessment in large-scale collaborative systems". Thèse de doct. Université de Lorraine, janvier 2018. [tel-01634377](#).
- [17] Giulia DE SANTIS. "Modeling and Recognizing Network Scanning Activities with Finite Mixture Models and Hidden Markov Models". Thèse de doct. Université de Lorraine, décembre 2018. [tel-02075680](#).
- [18] Florian GREFF. "SDRN : Software-Defined Real-Time Mesh Networking". Thèse de doct. Université de Lorraine, mai 2018. [tel-01862742](#).
- [19] Daishi KONDO. "Preventing information leakage in NDN with name and flow filters". Thèse de doct. Université de Lorraine, décembre 2018. [tel-02094910](#).
- [20] Salvatore SIGNORELLO. "A multifold approach to address the security issues of stateful forwarding mechanisms in Information-Centric Networks". Thèse de doct. Université de Lorraine, juin 2018. [tel-01883287](#).
- [21] Amina AHMED NACER. "Contribution to the secure deployment of business processes in the cloud". Thèse de doct. Université de Lorraine ; Université A. Mira (Bejaïa, Algérie), février 2019. [tel-02096672](#).
- [22] Marjan BOZORG. "Optimization of membrane process architecture". Thèse de doct. Université de Lorraine ; Università degli studi di Roma "Tor Vergata" (1972-....), décembre 2019. [tel-02556033](#).
- [23] Paul CHAINON. "Software Datapaths for Multi-Tenant Packet Processing". Thèse de doct. Université de Lorraine, mai 2019. [tel-02315651](#).
- [24] Meihui GAO. "Models and Methods for Network Function Virtualization (NFV) Architectures". Thèse de doct. Université de Lorraine, mars 2019. [tel-02132766](#).
- [25] Xavier MARCHAL. "Architectures and advanced functions for a progressive deployment of Information-Centric Networking". Thèse de doct. Université de Lorraine, juin 2019. [tel-02315611](#).
- [26] Thomas PARIS. "Complex System Modeling by composition : A hierarchical approach for heterogeneous components co-simulation". Thèse de doct. Université de Lorraine, mai 2019. [tel-02170266](#).
- [27] Guillaume ROSINOSKY. "Elasticity of business processes execution". Thèse de doct. Université de Lorraine, janvier 2019. [tel-02096324](#).

- [28] Nicolas SCHNEPF. "Orchestration and verification of security functions for smart devices". Thèse de doct. Université de Lorraine, septembre 2019. [tel-02351769](#).
- [29] Sven VALLÉE. "Optimization algorithms for a shared transport service". Thèse confidentielle jusqu'au 28 juin 2024. Ensuite le texte intégral sera accessible uniquement aux membres de l'Université de Lorraine. Thèse de doct. Université de Lorraine, juillet 2019. [tel-02331745](#).
- [30] Pierre-Olivier BRISSAUD. "HTTPS traffic analysis for the detection of user activity". Thèse de doct. Université de Lorraine, décembre 2020. [tel-03184002](#).
- [31] Bilal MESSAOUDI. "Decomposition approaches for real-world planning and vehicle routing problems". Thèse de doct. Université de Lorraine, novembre 2020. [tel-03203164](#).
- [32] Tayeb OULAD KOUIDER. "Optimisation of electric vehicle route planning". Thèse de doct. Université de Lorraine, décembre 2020. [tel-03132558](#).
- [33] Abdulqawi SAIF. "Experimental Methods for the Evaluation of Big Data Systems". Thèse de doct. Université de Lorraine, janvier 2020. [tel-02499941](#).
- [34] Ahmad ABOUD. "Efficient Rules Management Algorithms in Software Defined Networking". Thèse de doct. Université de Lorraine, décembre 2021. [tel-03508140](#).
- [35] Anis AHMED NACER. "Sure composition of API's based on contracts". Thèse de doct. Université de Lorraine, novembre 2021. [tel-03598259](#).
- [36] NORHANE BENKAHLA. "QoS management in LoRaWAN network with mobility". Thèse de doct. Ecole Supérieure des Communications de Tunis, juin 2021. [tel-03283203](#).
- [37] Virgile DAUGÉ. "Autonomous and communicating cyber-physical systems in unknown environments: Application to exploration by mobile robots". Thèse confidentielle jusqu'au 31 décembre 2021. Thèse de doct. Université de Lorraine, décembre 2021. [tel-03569053](#).
- [38] Théo DOCQUIER. "Performance evaluation methodologies for substation automation networks". Thèse de doct. Université de Lorraine, novembre 2021. [tel-03572299](#).
- [39] VICTORIEN ELVINGER. "Secured replication in collaborative P2P environment". Thèse de doct. Université de Lorraine, juin 2021. [tel-03284806](#).
- [40] Quentin LAPORTE-CHABASSE. "Morpho-statistical study of social networks. Application to inter-organisational collaborations". Thèse de doct. Université de Lorraine, janvier 2021. [tel-03229726](#).
- [41] Hoai LE NGUYEN. "Study of Conflicts in Collaborative Editing". Thèse de doct. Université de Lorraine, janvier 2021. [tel-03203102](#).
- [42] Mingxiao MA. "Attack Modelling and Detection in Distributed and Cooperative Control-led Microgrid Systems". Thèse de doct. Université de Lorraine, avril 2021. [tel-03356948](#).
- [43] Louis VIARD. "Methods and tools for cyber-physical systems programming". Thèse de doct. Université de Lorraine, avril 2021. [tel-03335428](#).

## Habilitations à diriger des recherches

- [44] Bernardetta ADDIS. "A journey through optimization : from global to discrete optimization and back." Habilitation à diriger des recherches. Université de Lorraine, décembre 2018. [tel-02976934](#).

- [45] Claudia-Lavinia IGNAT. "Large-scale trustworthy distributed collaboration". Habilitation à diriger des recherches. Université de Lorraine, avril 2021. [tel-03229173](#).

## Journaux internationaux

- [46] David N. YETTER. "Quantales and (noncommutative) linear logic". In : *Journal of Symbolic Logic* 55.1 (mars 1990), p. 41-64. DOI : [10.2307/2274953](https://doi.org/10.2307/2274953).
- [47] Sepp HOCHREITER et Jürgen SCHMIDHUBER. "Long Short-Term Memory". In : *Neural Comput.* 9.8 (novembre 1997), p. 1735-1780. DOI : [10.1162/neco.1997.9.8.1735](https://doi.org/10.1162/neco.1997.9.8.1735).
- [48] Chengzheng SUN, Xiaohua JIA, Yanchun ZHANG, Yun YANG et David CHEN. "Achieving Convergence, Causality Preservation, and Intention Preservation in Real-Time Cooperative Editing Systems". In : *ACM Transactions on Computer-Human Interaction* 5.1 (mars 1998), p. 63-108. URL : <http://doi.acm.org/10.1145/274444.274447>.
- [49] Sami BHIRI, Olivier PERRIN, Walid GAALOUL et Claude GODART. "An Object-Oriented Metamodel For Inter-Enterprises Cooperative Processes Based on Web Services". In : *Journal of Integrated Design and Process Science* 8 (2004), p. 37-55. [inria-00099953](#).
- [50] Yasushi SAITO et Marc SHAPIRO. "Optimistic Replication". In : *Computing Surveys* 37.1 (mars 2005), p. 42-81. URL : <http://doi.acm.org/10.1145/1057977.1057980>.
- [51] Michael P. PAPAZOGLOU, Paolo TRAVERSO, Schahram DUSTDAR et Frank LEYMANN. "Service-Oriented Computing : State of the Art and Research Challenges". In : *Computer* 40 (2007), p. 38-45.
- [52] Sami BHIRI, Walid GAALOUL et Claude GODART. "Mining and Improving Composite Web Services Recovery Mechanisms". In : *International Journal of Web Services Research* 3 (mars 2008). [inria-00438424](#).
- [53] Bernardetta ADDIS, Marco DI SUMMA et Andrea GROSSO. "Identifying critical nodes in undirected graphs : Complexity results and polynomial algorithms for the case of bounded treewidth". In : *Discrete Applied Mathematics* 161.16 (2013), p. 2349-2360. DOI : <https://doi.org/10.1016/j.dam.2013.03.021>. URL : <https://www.sciencedirect.com/science/article/pii/S0166218X13001686>.
- [54] Stefan SCHULTE, Christian JANIESCH, Sri Kumar VENUGOPAL, Ingo WEBER et Philipp HOENISCH. "Elastic Business Process Management : State of the art and open challenges for BPM in the cloud". In : *Future Generation Computer Systems* 46 (2015), p. 36-50. DOI : <http://dx.doi.org/10.1016/j.future.2014.09.005>. URL : <http://www.sciencedirect.com/science/article/pii/S0167739X1400168X>.
- [55] Bernardetta ADDIS, Roberto ARINGHIERI, Andrea GROSSO et Pierre HOSTEINS. "Hybrid constructive heuristics for the critical node problem". In : *Annals of Operations Research* 238.1-2 (2016), p. 637-649. DOI : [10.1007/s10479-016-2110-y](https://doi.org/10.1007/s10479-016-2110-y). [hal-01307739](#).
- [56] Bernardetta ADDIS, A. CAPONE, G. CARELLO, L.G. GIANOLI et B. SANSÒ. "Energy management in communication networks : a journey through modeling and optimization glasses". In : *Computer Communications* 91-92 (octobre 2016), p. 76-94. DOI : [10.1016/j.comcom.2016.05.009](https://doi.org/10.1016/j.comcom.2016.05.009). [hal-02976850](#).
- [57] Bernardetta ADDIS, Giuliana CARELLO, Andrea GROSSO et Elena TÀNFANI. "Operating room scheduling and rescheduling : a rolling horizon approach". In : *Flexible Services and Manufacturing Journal* (2016). DOI : [10.1007/s10696-015-9213-7](https://doi.org/10.1007/s10696-015-9213-7). [hal-01247520](#).

- [58] Bernardetta ADDIS, Giuliana CARELLO et Sara MATTIA. "Energy-aware survivable networks". In : *Electronic Notes in Discrete Mathematics* 52 (juin 2016), p. 133-140. DOI : [10.1016/j.endm.2016.03.018](https://doi.org/10.1016/j.endm.2016.03.018). hal-03168033.
- [59] Manceaux ANTOINE, Bril EL-HAOUZI HIND, Bentaha MOHAND LOUNES et WAHIBA RAMDANE CHERIF-KHETTAF. "Iterated Local Search for dynamic assembly line rebalancing problem". In : *IFAC-PapersOnLine* 49.12 (2016), p. 515-519. DOI : [10.1016/j.ifacol.2016.07.679](https://doi.org/10.1016/j.ifacol.2016.07.679). hal-01963200.
- [60] Nacer BOUDJLIDA et Badrina GASMI BOUMEZOUED. "Conceptual Graphs for Fomally Managing and Discovering Complementary Competences". In : *Lecture Notes in Artificial Intelligence* (2016). DOI : [10.1007/978-3-319-28702-7\\_6](https://doi.org/10.1007/978-3-319-28702-7_6). hal-01253436.
- [61] Stefan CANZAR, Sandro ANDREOTTI, David W WEESE, Knut REINERT et Gunnar W KLAU. "CIDANE : comprehensive isoform discovery and abundance estimation". In : *Genome Biology* 17 (2016), p. 16. DOI : [10.1186/s13059-015-0865-0](https://doi.org/10.1186/s13059-015-0865-0). hal-01397539.
- [62] Quang-Vinh DANG et Claudia-Lavinia IGNAT. "Quality Assessment of Wikipedia Articles : A Deep Learning Approach". In : *ACM SIGWEB Newsletter* (novembre 2016). DOI : [10.1145/2996442.2996447](https://doi.org/10.1145/2996442.2996447). hal-01393227.
- [63] Anthéa MAYZAUD, Rémi BADONNEL et Isabelle CHRISMENT. "A Taxonomy of Attacks in RPL-based Internet of Things". In : *International Journal of Network Security* 18.3 (mai 2016), p. 459-473. DOI : [10.6633/IJNS.201605.18\(3\).07](https://doi.org/10.6633/IJNS.201605.18(3).07). hal-01207859.
- [64] Yifei QI, Peng CHENG, Jing BAI, Jiming CHEN, Guénard ADRIEN, Ye-Qiong SONG et Zhiguo SHI. "Energy-Efficient Target Tracking by Mobile Sensors With Limited Sensing Range". In : *IEEE Transactions on Industrial Electronics* 63.11 (novembre 2016), p. 12. DOI : [10.1109/TIE.2016.2584000](https://doi.org/10.1109/TIE.2016.2584000). hal-01403761.
- [65] Younes RAHMANI, WAHIBA RAMDANE CHERIF-KHETTAF et Ammar OULAMARA. "The two-echelon multi-products location-routing problem with pickup and delivery : formulation and heuristic approaches". In : *International Journal of Production Research* 54.4 (2016), p. 999-1019. DOI : [10.1080/00207543.2015.1040127](https://doi.org/10.1080/00207543.2015.1040127). hal-01307014.
- [66] Mohammed Riyadh ABDMEZIEM, Djamel TANDJAOUI et Imed ROMDHANI. "Lightweigted and energy-aware MIKEY-Ticket for e-health applications in the context of internet of things". In : *International Journal of Sensor Networks* (2017). DOI : [10.1504/IJSNET.2018.090462](https://doi.org/10.1504/IJSNET.2018.090462). hal-01589967.
- [67] Bernardetta ADDIS, Giuliana CARELLO et Sara MATTIA. "Survivable green traffic engineering with shared protection". In : *Networks* 69.1 (janvier 2017), p. 6-22. DOI : [10.1002/net.21717](https://doi.org/10.1002/net.21717). hal-02976845.
- [68] Benjamin CAMUS, Julien VAUBOURG, Thomas PARIS, Yannick PRESSE, Christine BOURJOT, Laurent CIARLETTA et Vincent CHEVRIER. "Wrapping DEVS de modèles IP dans MEC-SYCO pour la co-simulation de systèmes cyber-physiques". In : *Revue des Sciences et Technologies de l'Information - Série TSI : Technique et Science Informatiques* 36.3-6 (2017), p. 185-215. DOI : [10.3166/tsi.2017.00010](https://doi.org/10.3166/tsi.2017.00010). hal-01952304.
- [69] Sylvain CONTASSOT-VIVIER, Jean-François COUCHOT, Christophe GUYEUX et Pierre-Cyrille HEAM. "Random Walk in a N-Cube Without Hamiltonian Cycle to Chaotic Pseudorandom Number Generation : Theoretical and Practical Considerations". In : *International journal of bifurcation and chaos in applied sciences and engineering* 27.01 (février 2017), p. 1750014. DOI : [10.1142/S0218127417500146](https://doi.org/10.1142/S0218127417500146). hal-03003541.

- [70] Filip DE TURCK, Joon-Myung KANG, Hyunseung CHOO, Myung-Sup KIM, Baek-Young CHOI, Rémi BADONNEL et James Won-Ki HONG. "Softwarization of networks, clouds, and internet of things". In : *International Journal of Network Management* 27.2 (mars 2017), p. 1-2. DOI : [10.1002/nem.1967](https://doi.org/10.1002/nem.1967). hal-01630838.
- [71] Claudia-Lavinia IGNAT, Luc ANDRÉ et Gérald OSTER. "Enhancing rich content wikis with real-time collaboration". In : *Concurrency and Computation : Practice and Experience* (mars 2017). DOI : [10.1002/cpe](https://doi.org/10.1002/cpe). hal-01404024.
- [72] Patrick Olivier KAMGUEU, Emmanuel NATAF et Thomas DJOTIO. "Architecture for an efficient integration of wireless sensor networks to the Internet through Internet of Things gateways". In : *International Journal of Distributed Sensor Networks* 13.11 (novembre 2017), p. 1-13. DOI : [10.1177/1550147717744735](https://doi.org/10.1177/1550147717744735). hal-01707937.
- [73] Ahmed KOUIDER, Hacène AIT HADDADÈNE, Samia OURARI et Ammar OULAMARA. "Mixed graph colouring for unit-time scheduling". In : *International Journal of Production Research* 55.6 (2017), p. 1720-1729. DOI : [10.1080/00207543.2016.1224950](https://doi.org/10.1080/00207543.2016.1224950). hal-03047101.
- [74] Sergey KOVALEV, Xavier DELORME, Alexandre DOLGUI et Ammar OULAMARA. "Minimizing the number of stations and station activation costs for a production line". In : *Computers and Operations Research* 79 (juillet 2017), p. 131-139. DOI : [10.1016/j.cor.2016.10.007](https://doi.org/10.1016/j.cor.2016.10.007). emse-01438176.
- [75] Anthéa MAYZAUD, Rémi BADONNEL et Isabelle CHRISMENT. "A Distributed Monitoring Strategy for Detecting Version Number Attacks in RPL-Based Networks". In : *IEEE Transactions on Network and Service Management* 14.2 (juin 2017), p. 472-486. DOI : [10.1109/TNSM.2017.2705290](https://doi.org/10.1109/TNSM.2017.2705290). hal-01630840.
- [76] Ons SASSI et Ammar OULAMARA. "Electric vehicle scheduling and optimal charging problem : complexity, exact and heuristic approaches". In : *International Journal of Production Research* 55.2 (janvier 2017), p. 519-535. DOI : [10.1080/00207543.2016.1192695](https://doi.org/10.1080/00207543.2016.1192695). hal-03047104.
- [77] René SCHOTT et George Stacey STAPLES. "Generalized zeon algebras : theory and application to multi-constrained path problems". In : *Advances in Applied Clifford Algebras* 27.1 (2017), p. 45-57. DOI : [10.1007/s00006-015-0595-0](https://doi.org/10.1007/s00006-015-0595-0). hal-00603748.
- [78] Radu S STOICA, Anne PHILIPPE, Pablo GREGORI et Jorge MATEU. "ABC Shadow algorithm : a tool for statistical analysis of spatial patterns". In : *Statistics and computing* 27.5 (2017), p. 1225-1238.
- [79] Terry-Ann SUER, Julien SIEBERT, Laurent REMUSAT, Nicolas MENGUY et Guillaume FIQUET. "A sulfur-poor terrestrial core inferred from metal-silicate partitioning experiments". In : *Earth and Planetary Science Letters* 469 (juillet 2017), p. 84-97. DOI : [10.1016/j.epsl.2017.04.016](https://doi.org/10.1016/j.epsl.2017.04.016). hal-01924800.
- [80] Bernardetta ADDIS, Meihui GAO et Giuliana CARELLO. "On the complexity of a Virtual Network Function Placement and Routing problem". In : *Electronic Notes in Discrete Mathematics* 69 (août 2018), p. 197-204. DOI : [10.1016/j.endm.2018.07.026](https://doi.org/10.1016/j.endm.2018.07.026). hal-02976835.

- [81] Rémi BADONNEL, Robert KOCH, Martin DRASAR, Aiko PRAS, Volker EISELER, Lars STIEMERT, Sebastian SEEGER, Daphné TUNCER, Marinos CHARALAMBIDES et Gabi Dreß RODOSEK. “Report on the 10th IFIP International Conference on Autonomous Infrastructure, Management, and Security (IFIP AIMS)”. In : *Journal of Network and Systems Management* 26.4 (octobre 2018), p. 1101-1109. DOI : [10.1007/s10922-018-9460-5](https://doi.org/10.1007/s10922-018-9460-5). hal-01937234.
- [82] Adel BELKADI, Zhixiang LIU, Laurent CIARLETTA, Youmin ZHANG et Didier THEILLIOL. “Flocking control of a fleet of unmanned aerial vehicles”. In : *Control Theory and Technology* 16.2 (mai 2018), p. 82-92. DOI : [10.1007/s11768-018-7300-5](https://doi.org/10.1007/s11768-018-7300-5). hal-01847741.
- [83] Benjamin CAMUS, Thomas PARIS, Julien VAUBOURG, Yannick PRESSE, Christine BOURJOT, Laurent CIARLETTA et Vincent CHEVRIER. “Co-simulation of cyber-physical systems using a DEVS wrapping strategy in the MECSYCO middleware”. In : *SIMULATION* 94.12 (décembre 2018), p. 1099-1127. DOI : [10.1177/0037549717749014](https://doi.org/10.1177/0037549717749014). hal-01762166.
- [84] Hayet CHENTLI, Rachid OUAFI et WAHIBA RAMDANE CHERIF-KHETTAFF. “A selective adaptive large neighborhood search heuristic for the profitable tour problem with simultaneous pickup and delivery services”. In : *RAIRO - Operations Research* 52.4-5 (octobre 2018), p. 1295-1328. DOI : [10.1051/ro/2018024](https://doi.org/10.1051/ro/2018024). hal-02982799.
- [85] Sylvain CONTASSOT-VIVIER, Jean-François COUCHOT et Pierre-Cyrille HÉAM. “Gray Codes Generation Algorithm and Theoretical Evaluation of Random Walks in N-Cubes”. In : *Mathematics* 6.6 (juin 2018), p. 14. DOI : [10.3390/math6060098](https://doi.org/10.3390/math6060098). hal-02063965.
- [86] Aurélien DEYA et René SCHOTT. “On multiplication in q-Wiener chaoses”. In : *Electronic Communications in Probability* 23 (2018). DOI : [10.1214/17-ECP104](https://doi.org/10.1214/17-ECP104). hal-01730320.
- [87] Aurélien DEYA et René SCHOTT. “On stochastic calculus with respect to q-Brownian motion”. In : *Journal of Functional Analysis* 274.4 (février 2018). arXiv : [1612.05757](https://arxiv.org/abs/1612.05757), p. 1047-1075. DOI : [10.1016/j.jfa.2017.08.019](https://doi.org/10.1016/j.jfa.2017.08.019). hal-01416950.
- [88] Youcef DJENOURI, Djamel DJENOURI et Zineb HABBAS. “Intelligent mapping between GPU and cluster computing for discovering big association rules”. In : *Applied Soft Computing* 65 (avril 2018), p. 387-399. DOI : [10.1016/j.asoc.2018.01.031](https://doi.org/10.1016/j.asoc.2018.01.031). hal-03251459.
- [89] Youcef DJENOURI, Djamel DJENOURI, Zineb HABBAS et Asma BELHADI. “How to exploit high performance computing in population-based metaheuristics for solving association rule mining problem”. In : *Distributed and Parallel Databases* 36.2 (juin 2018), p. 369-397. DOI : [10.1007/s10619-018-7218-4](https://doi.org/10.1007/s10619-018-7218-4). hal-03251465.
- [90] Milan ERDELJ, Borey UK, David KONAM et Enrico NATALIZIO. “From the Eye of the Storm : An IoT Ecosystem Made of Sensors, Smartphones and UAVs”. In : *Sensors* 18.11 (novembre 2018), p. 3814. DOI : [10.3390/s18113814](https://doi.org/10.3390/s18113814). hal-02993066.
- [91] Meihui GAO, Bernardetta ADDIS, Mathieu BOUET et Stefano SECCI. “Optimal Orchestration of Virtual Network Functions”. In : *Computer Networks* 142 (septembre 2018). arXiv : [1706.04762](https://arxiv.org/abs/1706.04762), p. 108-127. DOI : [10.1016/j.comnet.2018.06.006](https://doi.org/10.1016/j.comnet.2018.06.006). hal-01539481.
- [92] Cláudio GOMES, Casper THULE, David BROMAN, Peter Gorm LARSEN et Hans VANGHELUWE. “Co-Simulation : A Survey”. In : *ACM Comput. Surv.* 51.3 (mai 2018). DOI : [10.1145/3179993](https://doi.org/10.1145/3179993). URL : <https://doi.org/10.1145/3179993>.
- [93] Patrick Olivier KAMGUEU, Emmanuel NATAF et Thomas Djotio NDIE. “Survey on RPL enhancements : a focus on topology, security and mobility”. In : *Computer Communications* (février 2018), p. 1-17. DOI : [10.1016/j.comcom.2018.02.011](https://doi.org/10.1016/j.comcom.2018.02.011). hal-01713247.

- [94] Nesrine KHELIFI, Emmanuel NATAF, Sharief OTEAFY et Habib YOUSSEF. "Rescue-Sink : Dynamic sink augmentation for RPL in the Internet of Things". In : *Transactions on emerging telecommunications technologies* 29.2 (février 2018). DOI : [10.1002/ett.3278](https://doi.org/10.1002/ett.3278). hal-01708228.
- [95] Daishi KONDO, Thomas SILVERSTON, Vassilis VASSILIADES, Hideki TODE et Tohru ASAMI. "Name Filter : A Countermeasure against Information Leakage Attacks in Named Data Networking". In : *IEEE Access* (octobre 2018), p. 65151-65170. DOI : [10.1109/ACCESS.2018.2877792](https://doi.org/10.1109/ACCESS.2018.2877792). hal-01946259.
- [96] Hoai LE NGUYEN et Claudia-Lavinia IGNAT. "An Analysis of Merge Conflicts and Resolutions in Git-based Open Source Projects". In : *Computer Supported Cooperative Work* 27.3-6 (juin 2018), p. 741-765. DOI : [10.1007/s10606-018-9323-3](https://doi.org/10.1007/s10606-018-9323-3). hal-01917249.
- [97] Nadjat MEZIANI, Mourad BOUDHAR et Ammar OULAMARA. "PSO and simulated annealing for the two-machine flowshop scheduling problem with coupled-operations". In : *European Journal of Industrial Engineering* 12.1 (2018), p. 43. DOI : [10.1504/EJIE.2018.089877](https://doi.org/10.1504/EJIE.2018.089877). hal-03047063.
- [98] Lei MO, Xianghui CAO, Ye-Qiong SONG et Angeliki KRITIKAKOU. "Distributed Node Coordination for Real-Time Energy-Constrained Control in Wireless Sensor and Actuator Networks". In : *IEEE internet of things journal* (mai 2018), p. 1-12. DOI : [10.1109/JIOT.2018.2839030](https://doi.org/10.1109/JIOT.2018.2839030). hal-01825524.
- [99] Tan NGUYEN, Hoang-Long MAI, Guillaume DOYEN, Rémi COGRANNE, Wissam MALLOLU, Edgardo de OCA et Olivier FESTOR. "A Security Monitoring Plane for Named Data Networking Deployment". In : *IEEE Communications Magazine* 56.11 (novembre 2018), p. 88-94. DOI : [10.1109/mcom.2018.1701135](https://doi.org/10.1109/mcom.2018.1701135). hal-02407673.
- [100] Álvaro RAMÍREZ-SANTOS, M. BOZORG, Bernardetta ADDIS, V. PICCIALLI, C. CASTEL et E. FAVRE. "Optimization of multistage membrane gas separation processes. Example of application to CO<sub>2</sub> capture from blast furnace gas". In : *Journal of Membrane Science* 566 (novembre 2018), p. 346-366. DOI : [10.1016/j.memsci.2018.08.024](https://doi.org/10.1016/j.memsci.2018.08.024). hal-02939885.
- [101] Jeroen van der HOOFT, Maxim CLAEYS, Niels BOUTEN, Tim WAUTERS, Jürgen SCHÖNWÄLDER, Aiko PRAS, Burkhard STILLER, Marinos CHARALAMBIDES, Rémi BADONNEL, Joan SERRAT, Carlos Raniery Paula dos SANTOS et Filip DE TURCK. "Updated Taxonomy for the Network and Service Management Research Field". In : *Journal of Network and Systems Management* 26.3 (juillet 2018), p. 790-808. DOI : [10.1007/s10922-017-9443-y](https://doi.org/10.1007/s10922-017-9443-y). hal-01937230.
- [102] Mohammed Riyadh ABDMEZIEM. "Securing IoT-based collaborative applications using a new compressed and distributed MIKEY mode". In : *International Journal of Information and Computer Security* (mars 2019). hal-02378897.
- [103] Mohammed Riyadh ABDMEZIEM et François CHAROY. "Securing IoT-based Groups : Efficient, Scalable and Fault-tolerant Key Management Protocol". In : *Ad Hoc & Sensor Wireless Networks* (octobre 2019). hal-02378889.
- [104] Bernardetta ADDIS, Giuliana CARELLO et Meihui GAO. "On a virtual network functions placement and routing problem : Some properties and a comparison of two formulations". In : *Networks* 75.2 (octobre 2019), p. 158-182. DOI : [10.1002/net.21915](https://doi.org/10.1002/net.21915). hal-02976822.
- [105] Ahmad ADDOUM, Sylvain CONTASSOT-VIVIER et Fatmir ASLLANAJ. "Three-dimensional frequency-domain optical anisotropy imaging of biological tissues with near-infrared light". In : *Medical Physics* 46.9 (septembre 2019), p. 4057-4069. DOI : [10.1002/mp.13636](https://doi.org/10.1002/mp.13636). hal-03514713.

- [106] Amina AHMED NACER, Claude GODART, Guillaume ROSINOSKY, Abdelkamel TARI et Samir YOUSSEF. "Business process outsourcing to the cloud : Balancing costs with security risks". In : *Computers in Industry* 104 (janvier 2019), p. 59-74. DOI : [10.1016/j.compind.2018.10.003](https://doi.org/10.1016/j.compind.2018.10.003). hal-01888396.
- [107] Fatmir ASLLANAJ, Sylvain CONTASSOT-VIVIER, A. HOHMANN et A. KIENLE. "Light propagation in biological tissue". In : *Journal of Quantitative Spectroscopy and Radiative Transfer* 224 (février 2019), p. 78-90. DOI : [10.1016/j.jqsrt.2018.11.001](https://doi.org/10.1016/j.jqsrt.2018.11.001). hal-03514723.
- [108] Siavash ATARODI, Anna Maria BERARDI et Anne-Marie TONILO. "Comparing local policy practices to implement ICT-based home care services for aging-in-place in Finland, France, Italy, Spain & Sweden". In : *Gerontechnology* 18.2 (juin 2019), p. 108-121. DOI : [10.4017/gt.2019.18.2.005.00](https://doi.org/10.4017/gt.2019.18.2.005.00). hal-02315164.
- [109] Siavash ATARODI, Anna Maria BERARDI et Anne-Marie TONILO. "The technology acceptance model since 1986 : 30 years of development". In : *Psychologie du travail et des organisations* 25.3 (septembre 2019), p. 191-207. DOI : [10.1016/j.pto.2018.08.001](https://doi.org/10.1016/j.pto.2018.08.001). hal-01943567.
- [110] Adel BELKADI, Hernan ABAUNZA, Laurent CIARLETTA, Pedro CASTILLO GARCIA et Didier THEILLIOL. "Design and implementation of distributed path planning algorithm for a fleet of UAVs". In : *IEEE Transactions on Aerospace and Electronic Systems* 55.6 (décembre 2019), p. 2647-2657. DOI : [10.1109/TAES.2019.2906437](https://doi.org/10.1109/TAES.2019.2906437). hal-02102487.
- [111] M. BOZORG, Bernardetta ADDIS, V. PICCIALLI, Álvaro RAMÍREZ-SANTOS, C. CASTEL, I. PINNAU et E. FAVRE. "Polymeric membrane materials for nitrogen production from air : A process synthesis study". In : *Chemical Engineering Science* 207 (novembre 2019), p. 1196-1213. DOI : [10.1016/j.ces.2019.07.029](https://doi.org/10.1016/j.ces.2019.07.029). hal-02939668.
- [112] Pierre-Olivier BRISSAUD, Jérôme FRANÇOIS, Isabelle CHRISMENT, Thibault CHOLEZ et Olivier BETTAN. "Transparent and Service-Agnostic Monitoring of Encrypted Web Traffic". In : *IEEE Transactions on Network and Service Management* 16.3 (septembre 2019), p. 842-856. DOI : [10.1109/TNSM.2019.2933155](https://doi.org/10.1109/TNSM.2019.2933155). hal-02316644.
- [113] Aurélien DEYA et René SCHOTT. "Integration with respect to the non-commutative fractional Brownian motion". In : *Bernoulli* 25.3 (2019). arXiv : [1803.04834](https://arxiv.org/abs/1803.04834), p. 2137-2162. DOI : [10.3150/18-BEJ1048](https://doi.org/10.3150/18-BEJ1048). hal-01730260.
- [114] Youcef DJENOURI, Zineb HABBAS, Djamel DJENOURI et Philippe FOURNIER-VIGER. "Bee swarm optimization for solving the MAXSAT problem using prior knowledge". In : *Soft Computing* 23.9 (mai 2019), p. 3095-3112. DOI : [10.1007/s00500-017-2956-1](https://doi.org/10.1007/s00500-017-2956-1). hal-03251447.
- [115] Guillaume DOYEN, Thibault CHOLEZ, Wissam MALLOULI, Bertrand MATHIEU, Hoang-Long MAI, Xavier MARCHAL, Daishi KONDO, Messaoud AOUADJ, Alain PLOIX, Edgardo MONTES-DE-OCA et Olivier FESTOR. "An Orchestrated NDN Virtual Infrastructure transporting Web Traffic : Design, Implementation and First Experiments with Real End-Users". In : *IEEE Communications Magazine. The Quest for Information Centric Networking* 57.6 (juin 2019). DOI : [10.1109/MCOM.2019.1800730](https://doi.org/10.1109/MCOM.2019.1800730). hal-02353861.
- [116] Claudia-Lavinia IGNAT, Quang-Vinh DANG et Valerie SHALIN. "The Influence of Trust Score on Cooperative Behavior". In : *ACM Transactions on Internet Technology* 19.4 (septembre 2019). arXiv : [1910.09895](https://arxiv.org/abs/1910.09895), p. 1-22. DOI : [10.1145/3329250](https://doi.org/10.1145/3329250). hal-02307981.

- [117] Cyrille IMBERT, Thomas BOYER-KASSEM, Vincent CHEVRIER et Christine BOURJOT. "Improving Deliberations by Reducing Misrepresentation Effects". In : *Episteme* (2019), p. 1-17. DOI : [10.1017/epi.2018.41](https://doi.org/10.1017/epi.2018.41). hal-02011781.
- [118] Sofiane LAGRAA, Yutian CHEN et Jérôme FRANÇOIS. "Deep Mining Port Scans from Darknet". In : *International Journal of Network Management*. Special Issue : Advanced Security Management 29.3 (février 2019), e2065. DOI : [10.1002/nem.2065](https://doi.org/10.1002/nem.2065). hal-02403715.
- [119] Zhixiang LIU, Youmin ZHANG, Chi YUAN, Laurent CIARLETTA et Didier THEILLIOL. "Collision avoidance and path following control of unmanned aerial vehicle in hazardous environment". In : *Journal of Intelligent and Robotic Systems* 95.1 (juillet 2019), p. 193-210. DOI : [10.1007/s10846-018-0929-y](https://doi.org/10.1007/s10846-018-0929-y). hal-01949138.
- [120] Nesrine MAHDoui, Vincent FRÉMONT et Enrico NATALIZIO. "Communicating Multi-UAV System for Cooperative SLAM-based Exploration". In : *Journal of Intelligent and Robotic Systems* 98.2 (novembre 2019), p. 325-343. DOI : [10.1007/s10846-019-01062-6](https://doi.org/10.1007/s10846-019-01062-6). hal-02357577.
- [121] Dorra MARS, Sonia METTALI GAMMAR, Abdelkader LAHMADI et Leila AZOUZ SAIDANE. "Using Information Centric Networking in Internet of Things : A Survey". In : *Wireless Personal Communications* 105.1 (mars 2019), p. 87-103. DOI : [10.1007/s11277-018-018-04-8](https://doi.org/10.1007/s11277-018-018-04-8). hal-02393632.
- [122] Nadjat MEZIANI, Ammar OULAMARA et Mourad BOUDHAR. "Two-machine flowshop scheduling problem with coupled-operations". In : *Annals of Operations Research* 275.2 (avril 2019), p. 511-530. DOI : [10.1007/s10479-018-2967-z](https://doi.org/10.1007/s10479-018-2967-z). hal-02981096.
- [123] Lei Mo, Pengcheng YOU, Xianghui CAO, Ye-Qiong SONG et Angeliki KRITIKAKOU. "Event-Driven Joint Mobile Actuators Scheduling and Control in Cyber-Physical Systems". In : *IEEE Transactions on Industrial Informatics* (mars 2019), p. 1-13. DOI : [10.1109/TII.2019.2906061](https://doi.org/10.1109/TII.2019.2906061). hal-02080647.
- [124] Enrico NATALIZIO, Nicola Roberto ZEMA, Evsen YANMAZ, Luigi Di PUGLIA PUGLIESE et Francesca GUERRIERO. "Take the Field from your Smartphone : Leveraging UAVs for Event Filming". In : *IEEE Transactions on Mobile Computing* (mai 2019), p. 1-1. DOI : [10.1109/TMC.2019.2917176](https://doi.org/10.1109/TMC.2019.2917176). hal-02173797.
- [125] Tan NGUYEN, Hoang-Long MAI, Rémi COGRANNE, Guillaume DOYEN, Wissam MALLOLU, Luong NGUYEN, Moustapha EL AOUN, Edgardo Montes DE OCA et Olivier FESTOR. "Reliable Detection of Interest Flooding Attack in Real Deployment of Named Data Networking". In : *IEEE Transactions on Information Forensics and Security* 14.9 (septembre 2019), p. 2470-2489. DOI : [10.1109/TIFS.2019.2899247](https://doi.org/10.1109/TIFS.2019.2899247). hal-02068457.
- [126] Arbia RIAHI SFAR, Yacine CHALLAL, Pascal MOYAL et Enrico NATALIZIO. "A Game Theoretic Approach for Privacy Preserving Model in IoT-Based Transportation". In : *IEEE Transactions on Intelligent Transportation Systems* 20.12 (2019), p. 4405-4414. DOI : [10.1109/TITS.2018.2885054](https://doi.org/10.1109/TITS.2018.2885054). hal-02921498.
- [127] Nicolas SCHNEPF, Rémi BADONNEL, Abdelkader LAHMADI et Stephan MERZ. "Rule-Based Synthesis of Chains of Security Functions for Software-Defined Networks". In : *Electronic Communications of the EASST* 076 (2019). DOI : [10.14279/tuj.eceasst.76.1075.1042](https://doi.org/10.14279/tuj.eceasst.76.1075.1042). hal-02397981.

- [128] Anthony ANTHONY, Shihabur Rahman CHOWDHURY, Tim BAI, Raouf BOUTABA et Jérôme FRANÇOIS. "Non-intrusive and Workflow-aware Virtual Network Function Scheduling in User-space". In : *IEEE transactions on cloud computing* (septembre 2020). DOI : [10.1109/TCC.2020.3024232](https://doi.org/10.1109/TCC.2020.3024232). hal-02996459.
- [129] Nathalie AZEVEDO CARVALHO, Sylvain CONTASSOT-VIVIER, Laure BUHRY et Dominique MARTINEZ. "Simulation of Large Scale Neural Models With Event-Driven Connectivity Generation". In : *Frontiers in Neuroinformatics* 14 (octobre 2020), p. 14. DOI : [10.3389/fninf.2020.522000](https://doi.org/10.3389/fninf.2020.522000). hal-03041616.
- [130] Rémi BADONNEL, Carol FUNG, Qi LI et Sandra SCOTT-HAYWARD. "Guest Editorial : Special Section on Cybersecurity Techniques for Managing Networked Systems". In : *IEEE Transactions on Network and Service Management* 17.1 (mars 2020), p. 12-14. DOI : [10.1109/TNSM.2020.2972769](https://doi.org/10.1109/TNSM.2020.2972769). hal-02957559.
- [131] Amine BAINA, Khalid BENALI, Mostafa BELLAFAKIH et Nawal AIT AALI. "Unified enterprise modelling language-based interoperability for collaborative access control framework in critical infrastructures". In : *International Journal of Networking and Virtual Organisations* 22.1 (2020), p. 75-100. DOI : [10.1504/IJNVO.2020.104979](https://doi.org/10.1504/IJNVO.2020.104979). hal-03126794.
- [132] Senjuti BASU ROY, Lei CHEN, Atsuyuki MORISHIMA, James Abello MONEDERO, Pierre BOURHIS, François CHAROY, Marina DANILEVSKY, Gautam DAS, Gianluca DEMARTINI, Abishek DUBEY, Shady ELBASSUONI, David GROSS-AMBLARD, Emilie HOAREAU, Munenari INOGUCHI, Jared KENWORTHY, Itaru KITAHARA, Dongwon LEE, Yunyao LI, Ria Mae BORROMEO, Paolo PAPOTTI, Raghav RAO, Sudeepa ROY, Pierre SENELLART, Keishi TAJIMA, Saravanan THIRUMURUGANATHAN, Marion TOMMASI, Kazutoshi UMEMOTO, Andrea WIGGINS, Koichiro YOSHIDA et Sihem AMER-YAHIA. "Making AI Machines Work for Humans in FoW". In : *SIGMOD record* 49.2 (décembre 2020), p. 30-35. DOI : [10.1145/3442322.3442327](https://doi.org/10.1145/3442322.3442327). hal-03103700.
- [133] NORHANE BENKAHLA, Hajar TOUNSI, Ye Qiong SONG et Mounir FRIKHA. "Review and experimental evaluation of ADR enhancements for LoRaWAN networks". In : *Telecommunication Systems, Springer* (2020). DOI : [10.1007/s11235-020-00738-x](https://doi.org/10.1007/s11235-020-00738-x). hal-02975187.
- [134] M. BOZORG, Álvaro RAMÍREZ-SANTOS, Bernardetta ADDIS, V. PICCIALLI, E. FAVRE et Christophe CASTEL. "Optimal process design of biogas upgrading membrane systems : Polymeric vs high performance inorganic membrane materials". In : *Chemical Engineering Science* 225 (2020), p. 115769. DOI : [10.1016/j.ces.2020.115769](https://doi.org/10.1016/j.ces.2020.115769). hal-02939686.
- [135] Maxime COMPASTIÉ, Rémi BADONNEL, Olivier FESTOR et Ruan HE. "From virtualization security issues to cloud protection opportunities : An in-depth analysis of system virtualization models". In : *Computers and Security* 97 (octobre 2020), p. 101905. DOI : [10.1016/j.cose.2020.101905](https://doi.org/10.1016/j.cose.2020.101905). hal-02890270.
- [136] Abir DEROUICHE, Abdesslem LAYEB et Zineb HABBAS. "Metaheuristics Guided by the Apriori Principle for Association Rule Mining". In : *International Journal of Organizational and Collective Intelligence (IJOCI)* 10.3 (juillet 2020), p. 14-37. DOI : [10.4018/IJOCI.2020070102](https://doi.org/10.4018/IJOCI.2020070102). hal-03251431.
- [137] Aurélien DEYA et René SCHOTT. "Skorohod and rough integration with respect to the non-commutative fractional Brownian motion". In : *ALEA : Latin American Journal of Probability and Mathematical Statistics* (2020). arXiv : [1909.06270](https://arxiv.org/abs/1909.06270). DOI : [10.48550/arXiv.1909.06270](https://doi.org/10.48550/arXiv.1909.06270). hal-02286188.

- [138] Youcef DJENOURI, Djamel DJENOURI, Zineb HABBAS, Jerry Chun-Wei LIN, Tomasz MICHALAK et Alberto CANO. "When the Decomposition Meets the Constraint Satisfaction Problem". In : *IEEE Access* 8 (novembre 2020), p. 207034-207043. DOI : [10.1109/ACCESS.2020.3038228](https://doi.org/10.1109/ACCESS.2020.3038228). hal-03251425.
- [139] Alia GHADDAR, Ahmad MEREI et Enrico NATALIZIO. "PPS : Energy-Aware Grid-Based Coverage Path Planning for UAVs Using Area Partitioning in the Presence of NFZs". In : *Sensors* 20.13 (juillet 2020), p. 3742. DOI : [10.3390/s20133742](https://doi.org/10.3390/s20133742). hal-02993010.
- [140] Atef JABALLAH et Aref MEDDEB. "A new algorithm based CSP framework for RFID network planning". In : *Journal of Ambient Intelligence and Humanized Computing* 1 (août 2020). DOI : [10.1007/s12652-020-02446-5](https://doi.org/10.1007/s12652-020-02446-5). hal-02985156.
- [141] Sabato MANFREDI, Enrico NATALIZIO, Claudio PASCARIELLO et Nicola Roberto ZEMA. "Stability and Convergence of a Message-Loss-Tolerant Rendezvous Algorithm for Wireless Networked Robot Systems". In : *IEEE Transactions on Control of Network Systems* 7.3 (septembre 2020), p. 1103-1114. DOI : [10.1109/TCNS.2019.2963470](https://doi.org/10.1109/TCNS.2019.2963470). hal-02993027.
- [142] Lakhdar MEFTAH, Romain ROUVROY et Isabelle CHRISMENT. "Empowering Mobile Crowd-sourcing Apps with User Privacy Control". In : *Journal of Parallel and Distributed Computing* (août 2020), p. 15. DOI : [10.1016/j.jpdc.2020.07.011](https://doi.org/10.1016/j.jpdc.2020.07.011). hal-02910246.
- [143] Debashisha MISHRA et Enrico NATALIZIO. "A survey on cellular-connected UAVs : Design challenges, enabling 5G/B5G innovations, and experimental advancements". In : *Computer Networks* 182 (décembre 2020), p. 107451. DOI : [10.1016/j.comnet.2020.107451](https://doi.org/10.1016/j.comnet.2020.107451). hal-02992999.
- [144] Souhila SADEG, Leila HAMDAD, Hadjer CHETTAB, Karima BENATCHBA, Zineb HABBAS et M-Tahar KECHADI. "Feature selection based bee swarm meta-heuristic approach for combinatorial optimisation problems : a case-study on MaxSAT". In : *Memetic Computing* 12.4 (décembre 2020), p. 283-298. DOI : [10.1007/s12293-020-00310-9](https://doi.org/10.1007/s12293-020-00310-9). hal-03251440.
- [145] Sven VALLÉE, Ammar OULAMARA et WAHIBA RAMDANE CHERIF-KHETTAFF. "New online reinsertion approaches for a dynamic Dial-A-Ride Problem". In : *Journal of computational science* 47 (novembre 2020). DOI : [10.1016/j.jocs.2020.101199](https://doi.org/10.1016/j.jocs.2020.101199). hal-02981758.
- [146] Bernardetta ADDIS, Giuliana CARELLO et Meihui GAO. "ILP-based heuristics for a virtual network function placement and routing problem". In : *Networks*. Special Issue on New network models and approaches for logistics and transportation 78.3 (juillet 2021), p. 328-349. DOI : [10.1002/net.22073](https://doi.org/10.1002/net.22073). hal-03550765.
- [147] Fatmir ASLLANAJ, Sylvain CONTASSOT-VIVIER, Olivier BOTELLA et Francis H.R. FRANÇA. "Numerical solutions of radiative heat transfer in combustion systems using a parallel modified discrete ordinates method and several recent formulations of WSGG model". In : *Journal of Quantitative Spectroscopy and Radiative Transfer* 274 (novembre 2021), p. 107863. DOI : [10.1016/j.jqsrt.2021.107863](https://doi.org/10.1016/j.jqsrt.2021.107863). hal-03330769.
- [148] Nicolas CHAMPAGNAT, René SCHOTT et Denis VILLEMONAIS. "Analysis of distributed systems via quasi-stationary distributions". In : *Stochastic Analysis and Applications* 36.6 (2021), p. 981-998. DOI : [10.1080/07362994.2020.1861952](https://doi.org/10.1080/07362994.2020.1861952). hal-01710663.
- [149] Cherifa DAD, Jean-Philippe TAVELLA et Stéphane VIALLE. "Synthesis and feedback on the distribution and parallelization of FMI-CS-based co-simulations with the DACCOSIM platform". In : *Parallel Computing* 106 (septembre 2021), p. 102802. DOI : [10.1016/j.parco.2021.102802](https://doi.org/10.1016/j.parco.2021.102802). hal-03468312.

- [150] David ESPINEL SARMIENTO, Adrien LEBRE, Lucas NUSSBAUM et Abdelhadi CHARI. “Decentralized SDN Control Plane for a Distributed Cloud-Edge Infrastructure : A Survey”. In : *Communications Surveys and Tutorials, IEEE Communications Society*. IEEE Communications Surveys & Tutorials 23.1 (février 2021), p. 256-281. DOI : [10.1109/COMST.2021.3050297](https://doi.org/10.1109/COMST.2021.3050297). hal-03119901.
- [151] Mohamed Said FRIKHA, Sonia Mettali GAMMAR, Abdelkader LAHMADI et Laurent ANDREY. “Reinforcement and deep reinforcement learning for wireless Internet of Things : A survey”. In : *Computer Communications* 178 (octobre 2021), p. 98-113. DOI : [10.1016/j.comcom.2021.07.014](https://doi.org/10.1016/j.comcom.2021.07.014). hal-03409798.
- [152] Adrien HEMMER, Mohamed ABDERRAHIM, Rémi BADONNEL, Jérôme FRANÇOIS et Isabelle CHRISMENT. “Comparative Assessment of Process Mining for Supporting IoT Predictive Security”. In : *IEEE Transactions on Network and Service Management* 18.1 (mars 2021). DOI : [10.1109/TNSM.2020.3038172](https://doi.org/10.1109/TNSM.2020.3038172). hal-03019862.
- [153] Pierre LACLAU, Vladislav TEMPEZ, Franck RUFFIER, Enrico NATALIZIO et Jean-Baptiste MOURET. “Signal-Based Self-Organization of a Chain of UAVs for Subterranean Exploration”. In : *Frontiers in Robotics and AI* 8 (avril 2021). DOI : [10.3389/frobt.2021.614206](https://doi.org/10.3389/frobt.2021.614206). hal-03209269.
- [154] Abir LARABA, Jérôme FRANÇOIS, Shihabur RAHMAN CHOWDHURY, Isabelle CHRISMENT et Raouf BOUTABA. “Mitigating TCP Protocol Misuse With Programmable Data Planes”. In : *IEEE Transactions on Network and Service Management* 18.1 (mars 2021), p. 760-774. DOI : [10.1109/TNSM.2021.3054528](https://doi.org/10.1109/TNSM.2021.3054528). hal-03480222.
- [155] Debashisha MISHRA, Nicola Roberto ZEMA et Enrico NATALIZIO. “A High-End IoT Devices Framework to Foster Beyond-Connectivity Capabilities in 5G/B5G Architecture”. In : *IEEE Communications Magazine* 59.1 (janvier 2021), p. 55-61. DOI : [10.1109/MCOM.001.2000504](https://doi.org/10.1109/MCOM.001.2000504). hal-03541400.
- [156] Ammar OULAMARA, Hatice ÇALIK, Caroline PRODHON et Said SALHI. “The electric location-routing problem with heterogeneous fleet : Formulation and Benders decomposition approach”. In : *Computers and Operations Research* 131 (juillet 2021), p. 105251. DOI : [10.1016/j.cor.2021.105251](https://doi.org/10.1016/j.cor.2021.105251). hal-03561732.
- [157] Ye-Qiong SONG et Christopher GILL. “Guest Editorial : Special issue on outstanding papers from RTNS 2019”. In : *Real-Time Systems* 57.1-2 (avril 2021), p. 95-96. DOI : [10.1007/s11241-021-09363-6](https://doi.org/10.1007/s11241-021-09363-6). hal-03527030.
- [158] Juan Antonio VAZQUEZ TREJO, Adrien GUENARD, Manuel ADAM-MEDINA, Jean-Christophe PONSART, Ciarletta LAURENT, Damiano ROTONDO et Didier THEILLIOL. “Event-triggered leader-following formation control for multi-agent systems under communication faults : Application to a fleet of unmanned aerial vehicles”. In : *Journal of Systems Engineering and Electronics* 32.5 (octobre 2021), p. 1014-1022. DOI : [10.23919/JSEE.2021.000086](https://doi.org/10.23919/JSEE.2021.000086). hal-03468520.
- [159] Kun WANG, Zhibo WANG, Ye-Qiong SONG, Dejun YANG, Shibo HE et Wei WANG. “IEEE Access Special Section Editorial : Toward Smart Cities With IoT Based on Crowdsensing”. In : *IEEE Access* 9 (2021), p. 118606-118609. DOI : [10.1109/ACCESS.2021.3106756](https://doi.org/10.1109/ACCESS.2021.3106756). hal-03527031.

## Conférences invitées

- [160] François CHAROY. "Keynote : From group collaboration to large scale social collaboration". In : *25th IEEE International Conference on Enabling Technologies : Infrastructure for Collaborative Enterprises (WETICE-2016)*. Paris, France, juin 2016. [hal-01342751](#).
- [161] Lucas NUSSBAUM. "Chameleon, CloudLab, Grid'5000 : What will the ultimate testbed look like ?" In : *Grid'5000 Winter School 2016*. Grenoble, France, février 2016. [hal-01274298](#).
- [162] Lucas NUSSBAUM. "Deployment of Cloud stacks on Grid'5000". In : *GEFI Workshop*. Brussels, Belgique, avril 2016. [hal-01313210](#).
- [163] Lucas NUSSBAUM. "Federating Grid'5000". In : *GEFI Workshop*. Brussels, Belgique, avril 2016. [hal-01313207](#).
- [164] Lucas NUSSBAUM. "Grid'5000 : a Large-Scale Instrument for Parallel and Distributed Computing Experiments". In : *CloudCom'2016*. Luxembourg, Luxembourg, décembre 2016. [hal-01427041](#).
- [165] Lucas NUSSBAUM. "SDN/NFV experiments on Grid'5000". In : *GEFI Workshop*. Brussels, Belgique, avril 2016. [hal-01313204](#).
- [166] Lucas NUSSBAUM. "Supporting Big Data experiments on Grid'5000". In : *GEFI Workshop*. Brussels, Belgique, avril 2016. [hal-01308370](#).
- [167] Lucas NUSSBAUM. "Experimenting on Architectures for High Performance Computing". In : *École ARCHI 2017 - Architectures des Systèmes Matériels et Logiciels Embarqués et Méthodes de Conception Associées*. Nancy, France, mars 2017, p. 65. [hal-01538680](#).
- [168] Lucas NUSSBAUM. "Scaling your experiments". In : *École RESCOM 2017*. Le Croisic, France, juin 2017. [hal-01577847](#).
- [169] Lucas NUSSBAUM. "Testbeds in Computer Science". In : *Reproducible Research Webinars*. Grenoble, France, juin 2017. [hal-01538683](#).
- [170] Ludomir OTESKI, Guillaume COLIN-DE-VERDIÈRE, Sylvain CONTASSOT-VIVIER, Stephane VIALLE et Juliet RYAN. "A Simple Guideline for Code Optimizations on Modern Architectures with OpenACC and CUDA". In : *GPU Technology Conference 2017*. NVIDIA. San Jose, United States, mai 2017. [hal-01527684](#).
- [171] Abdulqawi SAIF, Lucas NUSSBAUM et Ye-Qiong SONG. *MongoDB I/O Access Patterns are under the Microscope*. Annual PhD students conference IAEM Lorraine 2017. Poster. Octobre 2017. [hal-01793531](#).
- [172] Abdulqawi SAIF, Lucas NUSSBAUM et Ye-Qiong SONG. "Performance Evaluation of MongoDB I/O access patterns". In : *CLOUD DAYS'2017*. Action transverse Virtualisation et Cloud du GdR RSD. Nancy, France, septembre 2017. [hal-01793479](#).
- [173] Claudia-Lavinia IGNAT. "Keynote : From groupware to large-scale trustworthy distributed collaborative systems". In : *CRIWG 2018 - 24th International Conference on Collaboration and Technology*. Costa de Caparica, Portugal, septembre 2018. [hal-01875534](#).
- [174] Abdelkader LAHMADI et Frédéric BECK. *Security Analysis of Internet of Things Devices : Hands-on lab*. AIMS 2018 - 12th International Conference on Autonomous Infrastructure, Management and Security. Juin 2018. [hal-01943543](#).

- [175] Mohamed ABDERRAHIM, Meryem OUZZIF, Karine GUILLOUARD, Jérôme FRANÇOIS, Adrien LEBRE, Charles PRUD'HOMME et Xavier LORCA. "Efficient Resource Allocation for Multi-tenant Monitoring of Edge Infrastructures". In : *PDP 2019 - 27th Euromicro International Conference on Parallel, Distributed and Network-Based Processing*. 27th Euromicro International Conference on Parallel, Distributed and Network-Based Processing. Pavie, Italy : IEEE, février 2019, p. 1-8. DOI : [10.1109/EMPDP.2019.8671621](https://doi.org/10.1109/EMPDP.2019.8671621). [hal-01987946](https://hal.archives-ouvertes.fr/hal-01987946).

## Conférences internationales majeures

- [176] Elian AUBRY, Thomas SILVERSTON et Isabelle CHRISMENT. "Green Growth in NDN : Deployment of Content Stores". In : *LANMAN 2016 - IEEE International Symposium on Local and Metropolitan Area Networks*. Local and Metropolitan Area Networks (LAN-MAN), 2016 IEEE International Symposium on. IEEE. Rome, Italy, juin 2016. DOI : [10.1109/LANMAN.2016.7548850](https://doi.org/10.1109/LANMAN.2016.7548850). [hal-01405820](https://hal.archives-ouvertes.fr/hal-01405820).
- [177] Loïck BRIOT, Pascal URSO et Marc SHAPIRO. "High Responsiveness for Group Editing CRDTs". In : *ACM International Conference on Supporting Group Work*. Sanibel Island, FL, United States, novembre 2016. DOI : [10.1145/2957276.2957300](https://doi.org/10.1145/2957276.2957300). [hal-01343941](https://hal.archives-ouvertes.fr/hal-01343941).
- [178] Laurent CIARLETTA, Loïc FEJOZ, Adrien GUENARD et Nicolas NAVET. "Development of a safe CPS component : the hybrid parachute, a remote termination add-on improving safety of UAS". In : *ERTS 2016 - 8th European Congress on Embedded Real Time Software and Systems*. Toulouse, France, janvier 2016, p. 10. [hal-01251305](https://hal.archives-ouvertes.fr/hal-01251305).
- [179] Laurent CIARLETTA et Thomas GURRIET. "Towards a Generic and Modular Geofencing Strategy for Civilian UAVs". In : *2016 International Conference on Unmanned Aircraft Systems*. 2016 ICUAS Proceedings 9781467393355. Arlington, VA, United States, juin 2016. [hal-01398431](https://hal.archives-ouvertes.fr/hal-01398431).
- [180] Maxime COMPASTIÉ, Rémi BADONNEL, Olivier FESTOR, Ruan HE et Mohamed KASSI-LAHLOU. "A Software-Defined Security Strategy for Supporting Autonomic Security Enforcement in Distributed Cloud". In : *CloudCom 2016 - IEEE International Conference on Cloud Computing Technology and Science*. Proceeding of 2016 IEEE International Conference on Cloud Computing Technology and Science (CloudCom). Luxembourg, Luxembourg : IEEE, décembre 2016, p. 4. DOI : [10.1109/CloudCom.2016.0079](https://doi.org/10.1109/CloudCom.2016.0079). [hal-0139458](https://hal.archives-ouvertes.fr/hal-0139458).
- [181] Quang-Vinh DANG et Claudia-Lavinia IGNAT. "Computational Trust Model for Repeated Trust Games". In : *The 15th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom-16)*. Proceedings of the 15th IEEE International Conference on Trust, Security and Privacy in Computing and Communications. Tianjin, China, août 2016. [hal-01351250](https://hal.archives-ouvertes.fr/hal-01351250).
- [182] Quang-Vinh DANG et Claudia-Lavinia IGNAT. "Measuring Quality of Collaboratively Edited Documents : the case of Wikipedia". In : *Proceedings of the 2nd IEEE International Conference on Collaboration and Internet Computing (CIC-16)*. Pittsburgh, United States, novembre 2016. [hal-01388614](https://hal.archives-ouvertes.fr/hal-01388614).

- [183] Quang-Vinh DANG et Claudia-Lavinia IGNAT. "Quality Assessment of Wikipedia Articles without Feature Engineering". In : *Proceedings of the 16th ACM/IEEE-CS on Joint Conference on Digital Libraries*. Newark, United States : ACM, juin 2016, p. 27-30. DOI : [10.1145/2910896.2910917](https://doi.org/10.1145/2910896.2910917). hal-01351226.
- [184] Giulia DE SANTIS, Abdelkader LAHMADI, Jerome FRANCOIS et Olivier FESTOR. "Modeling of IP scanning activities with Hidden Markov Models : Darknet case study". In : *8th IFIP International Conference on New Technologies, Mobility and Security*. International Conference on New Technologies, Mobility and Security (NTMS). Larnaca, Cyprus, novembre 2016. hal-01404127.
- [185] Lautaro DOLBERG, Jerome FRANCOIS, Shihabur Rahman CHOWDHURY, Reaz AHMED, Raouf BOUTABA et Thomas ENGEL. "A Generic Framework to Support Application-Level Flow Management in Software-Defined Networks". In : *Conference on Network Softwarization (Netsoft)*. Seoul, South Korea : IEEE, juin 2016. hal-01310574.
- [186] Martine GAUTIER et Brigitte WROBEL-DAUTCOURT. "artEoz - dynamic program visualization". In : *International Conference on Informatics in Schools : Situation, Evolution, and Perspectives, ISSEP 2016*. Munster, Germany, octobre 2016, p. 2. hal-01388703.
- [187] Florian GREFF, Eric DUJARDIN, Arnaud SAMAMA, Ye-Qiong SONG et Laurent CIARLETTA. "A Symbiotic Approach to Designing Cross-Layer QoS in Embedded Real-Time Systems". In : *8th European Congress on Embedded Real Time Software and Systems (ERTS 2016)*. Toulouse, France, janvier 2016. hal-01242068.
- [188] Daishi KONDO, Thomas SILVERSTON, Hideki TODE, Tohru ASAMI et Olivier PERRIN. "Name anomaly detection for ICN". In : *2016 IEEE International Symposium on Local and Metropolitan Area Networks (LANMAN)*. Rome, Italy, juin 2016, p. 1-6. DOI : [10.1109/LANMAN.2016.7548854](https://doi.org/10.1109/LANMAN.2016.7548854). hal-01410260.
- [189] Xavier MARCHAL, Thibault CHOЛЕZ et Olivier FESTOR. "Server-side performance evaluation of NDN". In : *3rd ACM Conference on Information-Centric Networking (ACM-ICN'16)*. ACM SIGCOMM. Kyoto, Japan : ACM, septembre 2016, p. 148-153. DOI : [10.1145/2984356.2984364](https://doi.org/10.1145/2984356.2984364). hal-01386777.
- [190] Anthéa MAYZAUD, Rémi BADONNEL et Isabelle CHRISMENT. "Detecting Version Number Attacks in RPL-based Networks using a Distributed Monitoring Architecture". In : *IEEE/IFIP/In Assoc. with ACM SIGCOMM International Conference on Network and Service Management (CNSM'16)*. Montreal, Canada, octobre 2016, p. 9. hal-01399432.
- [191] Anthéa MAYZAUD, Anuj SEHGAL, Rémi BADONNEL, Isabelle CHRISMENT et Jürgen SCHÖNWÄLDER. "Using the RPL Protocol for Supporting Passive Monitoring in the Internet of Things". In : *IEEE/IFIP Network Operations and Management Symposium*. Istanbul, Turkey, avril 2016. hal-01247297.
- [192] Thomas PARIS, Alexandre TAN, Vincent CHEVRIER et Laurent CIARLETTA. "Study about decomposition and integration of continuous systems in discrete environment". In : *Annual Simulation Symposium (ANSS)*. Proceedings of the Annual Simulation Symposium (ANSS) 2016. Pasadena, United States, avril 2016. hal-01256969.
- [193] Vassili RIVRON, Mohammad Irfan KHAN, Simon CHARNEAU et Isabelle CHRISMENT. "Exploring Smartphone Application Usage Logs with Declared Sociological Information". In : *SocialCom 2016 - 9th IEEE International Conference on Social Computing and Networking*. Atlanta, United States : IEEE, octobre 2016, p. 266-273. DOI : [10.1109/BDCloud-SocialCom-SustainCom.2016.49](https://doi.org/10.1109/BDCloud-SocialCom-SustainCom.2016.49). hal-01378795.

- [194] Guillaume ROSINOSKY, Samir YOUSSEF et François CHAROY. "An Efficient Approach for Multi-tenant Elastic Business Processes Management in Cloud Computing Environment". In : *CoopIS 2016 - 24th International Conference on COOPERATIVE INFORMATION SYSTEMS*. San Francisco, United States, juin 2016. [hal-01300188](#).
- [195] Cristian RUIZ, Joseph EMERAS, Emmanuel JEANVOINE et Lucas NUSSBAUM. "Distem : Evaluation of Fault Tolerance and Load Balancing Strategies in Real HPC Runtimes through Emulation". In : *CCGRID - 16th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing*. Cartagena, Colombia, mai 2016. [hal-00949762](#).
- [196] Sebastian SEEGER, Gabi Dreß RODOSEK, Gaëtan HUREL et Rémi BADONNEL. "Analysis and Evaluation of OpenFlow Message Usage for Security Applications". In : *10th IFIP International Conference on Autonomous Infrastructure, Management and Security (AIMS)*. Sous la dir. de Rémi BADONNEL, Robert KOCH, Aiko PRAS, Martin DRAŠAR et Burkhard STILLER. T. LNCS-9701. Management and Security in the Age of Hyperconnectivity. Part 3 : Security Attacks and Defenses. Munich, Germany : Springer International Publishing, juin 2016, p. 84-97. DOI : [10.1007/978-3-319-39814-3\\_9](https://doi.org/10.1007/978-3-319-39814-3_9). [hal-01632745](#).
- [197] Wazen M. SHBAIR, Thibault CHOLEZ, Jérôme FRANÇOIS et Isabelle CHRISMENT. "A Multi-Level Framework to Identify HTTPS Services". In : *IEEE/IFIP Network Operations and Management Symposium (NOMS 2016)*. IEEE/IFIP. Istanbul, Turkey : IEEE, avril 2016, p240-248. DOI : [10.1109/NOMS.2016.7502818](https://doi.org/10.1109/NOMS.2016.7502818). [hal-01273160](#).
- [198] Evangelia TSIONTSIOU, Bernardetta ADDIS, Ye-Qiong SONG et Alberto CESELLI. "Optimal Probabilistic Energy-Aware Routing for Duty-Cycled Wireless Sensor Networks". In : *8th IFIP International Conference on New Technologies, Mobility and Security (NTMS 2016)*. Larnaca, Cyprus, novembre 2016. [hal-01404169](#).
- [199] Mohamed ABDERRAHIM, Meryem OUZZIF, Karine GUILLOUARD, Jerome FRANCOIS et Adrien LEBRE. "A Holistic Monitoring Service for Fog/Edge Infrastructures : a Foresight Study". In : *The IEEE 5th International Conference on Future Internet of Things and Cloud (FiCloud 2017)*. Prague, Czech Republic, août 2017, p. 337-344. DOI : [10.1109/FiCloud.2017.30](https://doi.org/10.1109/FiCloud.2017.30). [hal-01591161](#).
- [200] Amina AHMED NACER, Claude GODART, Samir YOUSSEF et Abdelkamel TARI. "A Metric for Evaluating the Privacy Level of a Business Process Logic in a Multi-Cloud Deployment". In : *IEEE 21st International Enterprise Distributed Object Computing Conference (EDOC)*. Quebec, Canada, octobre 2017. [hal-01620023](#).
- [201] Petro AKSONENKO, Vadym AVRUTOV, Yu F. LAZAREV, Patrick HENAFF et Laurent CIARLETTA. "Overclocking Algorithms for SINS". In : *APUAVID 2017 - 4th IEEE International Conference Actual Problems of Unmanned Aerial Vehicles Developments*. Kiev, Ukraine : IEEE, octobre 2017, p. 125-129. DOI : [10.1109/APUAVID.2017.8308791](https://doi.org/10.1109/APUAVID.2017.8308791). [hal-01843054](#).
- [202] Elian AUBRY, Thomas SILVERSTON et Isabelle CHRISMENT. "Implementation and Evaluation of a Controller-Based Forwarding Scheme for NDN". In : *AINA 2017 - IEEE 31st International Conference on Advanced Information Networking and Applications*. IEEE. Taipei, Taiwan, mars 2017, p. 144-151. DOI : [10.1109/AINA.2017.83](https://doi.org/10.1109/AINA.2017.83). [hal-01616234](#).
- [203] V V AVRUTOV, P M AKSONENKO, P HENAFF et Laurent CIARLETTA. "3D-Calibration of the IMU". In : *ELNANO 2017 - IEEE 37th International Conference on Electronics and Nanotechnology*. Electronics and Nanotechnology (ELNANO), 2017 IEEE 37th International Conference on. KIEV, Ukraine : IEEE, avril 2017, p. 1-6. DOI : [10.1109/ELNANO.2017.7939782](https://doi.org/10.1109/ELNANO.2017.7939782). [hal-01654279](#).

- [204] Adel BELKADI, Hernan ABAUNZA, Laurent CIARLETTA, Pedro CASTILLO GARCIA et Didier THEILLIOL. "Distributed path planning for controlling a fleet of UAVs : application to a team of quadrotors". In : *20th International Federation of Automatic Control World Congress (IFAC WC 2017)*. Toulouse, France, juillet 2017, p. 15983-15988. [hal-01537777](#).
- [205] Maxime COMPASTIÉ, Rémi BADONNEL, Olivier FESTOR, Ruan HE et Mohamed KASSI-LAHLOU. "Towards a Software-Defined Security Framework for Supporting Distributed Cloud". In : *AIMS 2017 - 11th IFIP International Conference on Autonomous Infrastructure, Management and Security*. Sous la dir. de Daphne TUNCER, Robert KOCH, Rémi BADONNEL et Burkhard STILLER. T. LNCS-10356. Security of Networks and Services in an All-Connected World. Part 2 : Management of Cloud Environments and Services. Zurich, Switzerland : Springer International Publishing, juillet 2017, p. 47-61. DOI : [10.1007/978-3-319-60774-0\\_4](https://doi.org/10.1007/978-3-319-60774-0_4). [hal-01806058](#).
- [206] Sylvain CONTASSOT-VIVIER et Jean-François COUCHOT. "Canonical Form of Gray Codes in N-cubes". In : *23th International Workshop on Cellular Automata and Discrete Complex Systems (AUTOMATA)*. Sous la dir. d'Alberto DENNUNZIO, Enrico FORMENTI, Luca MANZONI et Antonio E. PORRECA. T. LNCS-10248. Cellular Automata and Discrete Complex Systems. Part 2 : Regular Papers. Milan, Italy : Springer International Publishing, juin 2017, p. 68-80. DOI : [10.1007/978-3-319-58631-1\\_6](https://doi.org/10.1007/978-3-319-58631-1_6). [hal-01656349](#).
- [207] Quang-Vinh DANG et Claudia-Lavinia IGNAT. "An end-to-end learning solution for assessing the quality of Wikipedia articles". In : *OpenSym 2017 - International Symposium on Open Collaboration*. Galway, Ireland, août 2017. DOI : [10.1145/3125433.3125448](https://doi.org/10.1145/3125433.3125448). [hal-01559693](#).
- [208] Quang-Vinh DANG et Claudia-Lavinia IGNAT. "dTrust : a simple deep learning approach for social recommendation". In : *The 3rd IEEE International Conference on Collaboration and Internet Computing (CIC-17)*. San Jose, United States, octobre 2017. [hal-01578316](#).
- [209] Virginie GALTIER, Michel IANOTTO, Mathieu CAUJOLLE, Rémi CORNIGLION, Jean-Philippe TAVELLA, José ÉVORA GÓMEZ, José Juan HERNÁNDEZ CABRERA, Vincent REINBOLD et Enrique KREMERS. "Experimenting with Matryoshka Co-Simulation : Building Parallel and Hierarchical FMUs". In : *12th International Modelica Conference*. Prague, Czech Republic, mai 2017. [hal-01521767](#).
- [210] Florian GREFF, Ye-Qiong SONG, Laurent CIARLETTA et Arnaud SAMAMA. "A Dynamic Flow Allocation Method for the Design of a Software-Defined Real-Time Mesh Network". In : *WFCS 2017 - 13th IEEE International Workshop on Factory Communication Systems*. Proceedings of the 13th IEEE International Workshop on Factory Communication Systems (WFCS 2017). Trondheim, Norway, mai 2017. DOI : [10.1109/WFCS.2017.7991949](https://doi.org/10.1109/WFCS.2017.7991949). [hal-01529837](#).
- [211] Florian GREFF, Ye-Qiong SONG, Laurent CIARLETTA et Arnaud SAMAMA. "Combining Source and Destination-Tag Routing to Handle Fault Tolerance in Software-Defined Real-Time Mesh Networks". In : *25th International Conference on Real-Time Networks and Systems*. Grenoble, France, octobre 2017. [hal-01614268](#).
- [212] Abouliakdane KHATTARA, WAHIBA RAMDANE CHERIF-KHETTAF et Mohamed MOSTEFAI. "Variable Neighborhood Search Procedures for the Multi-Period Technician Routing and Scheduling Problem". In : *4th International Conference on Control, Decision and Information Technologies*. IEEE CoDIT'17. Barcelone, Spain : IEEE Xplore, avril 2017. DOI : [10.1109/CoDIT.2017.8102699](https://doi.org/10.1109/CoDIT.2017.8102699). [hal-02982815](#).

- [213] Daishi KONDO, Thomas SILVERSTON, Hideki TODE, Tohru ASAMI et Olivier PERRIN. "Risk analysis of information-leakage through interest packets in NDN". In : *INFOCOM WKSHPS 2017 - IEEE International Conference on Computer Communications*. Atlanta, United States, mai 2017. [hal-01946257](#).
- [214] Sofiane LAGRAA, Jerome FRANCOIS, Abdelkader LAHMADI, Marine MINIER, Christian HAMMERSCHMIDT et Radu STATE. "BotGM : Unsupervised Graph Mining to Detect Botnets in Traffic Flows". In : *CSNet 2017 - 1st Cyber Security in Networking Conference*. Rio de Janeiro, Brazil, octobre 2017. [hal-01636480](#).
- [215] Dorin MAXIM et Ye-Qiong SONG. "Delay Analysis of AVB traffic in Time-Sensitive Networks (TSN)". In : *RTNS 2017 - International Conference on Real-Time Networks and Systems*. Grenoble, France, octobre 2017, p. 10. DOI : [10.1145/3139258.3139283](https://doi.org/10.1145/3139258.3139283). [hal-01614677](#).
- [216] Lakhdar MEFTAH, Maria GOMEZ, Romain ROUVOY et Isabelle CHRISMENT. "Andro-Fleet : Testing WiFi Peer-to-Peer Mobile Apps in the Large". In : *ASE 2017 - 32nd IEEE/ACM International Conference on Automated Software Engineering*. ASE 2017 - The 32nd IEEE/ACM International Conference on Automated Software Engineering - Tool demonstration. Urbana-Champaign, Illinois, United States, octobre 2017. [hal-01574466](#).
- [217] Julio NAVARRO, Véronique LEGRAND, Sofiane LAGRAA, Jérôme FRANÇOIS, Abdelkader LAHMADI, Giulia DE SANTIS, Olivier FESTOR, Nadira LAMMARI, Fayçal HAMDI, Aline DERUYVER, Quentin GOUX, Morgan ALLARD et Pierre PARREND. "HuMa : A Multi-layer Framework for Threat Analysis in a Heterogeneous Log Environment". In : *10th international symposium on foundations and practice of security*. Nancy, France, octobre 2017, p. 144-159. DOI : [10.1007/978-3-319-75650-9\\_10](https://doi.org/10.1007/978-3-319-75650-9_10). [hal-02460272](#).
- [218] Ngoc Tan NGUYEN, Xavier MARCHAL, Guillaume DOYEN, Thibault CHOLEZ et Rémi COGRANNE. "Content Poisoning in Named Data Networking : Comprehensive Characterization of real Deployment". In : *15th IFIP/IEEE International Symposium on Integrated Network Management (IM2017)*. Lisbon, Portugal, mai 2017, p. 72-80. DOI : [10.23919/INM.2017.7987266](https://doi.org/10.23919/INM.2017.7987266). [hal-01652328](#).
- [219] Ludomir OTESKI, Guillaume COLIN DE VERDIERE, Sylvain CONTASSOT-VIVIER, stephane vialle stephane et Juliette RYAN. "Towards an Efficient CPU-GPU Code Hybridization : a Simple Guideline for Code Optimizations on Modern Architecture with OpenACC and CUDA". In : *GPU Technology Conference (GTC)*. Munich, Germany, octobre 2017. [hal-01651967](#).
- [220] Thomas PARIS, Laurent CIARLETTA et Vincent CHEVRIER. "Designing co-simulation with multi-agent tools : a case study with NetLogo". In : *15th European Conference on Multi-Agent Systems (EUMAS 2017)*. Sous la dir. d'Estefanía Argente FRANCESCO BELARDINELLI. T. 10767. Multi-Agent Systems and Agreement Technologies. Évry, France : Springer, décembre 2017, p. 253-267. DOI : [10.1007/978-3-030-01713-2\\_18](https://doi.org/10.1007/978-3-030-01713-2_18). [hal-01687101](#).
- [221] Guillaume ROSINOSKY, Samir YOUSSEF et François CHAROY. "Efficient Migration-Aware Algorithms for Elastic BPMaaS". In : *15th International Conference on Business Process Management (BPM)*. Barcelona, Spain, septembre 2017. [hal-01501705](#).

- [222] Nicolas SCHNEPF, Rémi BADONNEL, Abdelkader LAHMADI et Stephan MERZ. "Automated Verification of Security Chains in Software-Defined Networks with Synaptic". In : *NetSoft 2017 - IEEE Conference on Network Softwarization*. Bologna, Italy : IEEE Computer Society, juillet 2017, 9pp. DOI : [10.1109/NETSOFT.2017.8004195](https://doi.org/10.1109/NETSOFT.2017.8004195). hal-01630806.
- [223] Salvatore SIGNORELLO, Samuel MARCHAL, Jerome FRANCOIS, Olivier FESTOR et Radu STATE. "Advanced Interest Flooding Attacks in Named-Data Networking". In : *NCA 2017 - IEEE International Symposium on Network Computing and Applications*. Cambridge, United States, octobre 2017. hal-01636494.
- [224] Shuguo ZHUO et Yeqiong SONG. "GoMacH : A Traffic Adaptive Multi-channel MAC Protocol for IoT". In : *The 42nd IEEE Conference on Local Computer Networks (LCN)*. Singapore, Singapore, octobre 2017. hal-01616834.
- [225] Petro AKSONENKO, Vadym AVRUTOV, Yu F. LAZAREV, Patrick HENAFF et Laurent CIARLETTA. "Expanded Algorithm for Inertial Navigation". In : *SAI 2018 - IEEE Computing Conference*. londres, United Kingdom, juillet 2018. hal-01843047.
- [226] Anthony ANTHONY, Shihabur Rahman CHOWDHURY, Tim BAI, Raouf BOUTABA et Jerome FRANCOIS. "UNiS : A User-space Non-intrusive Workflow-aware Virtual Network Function Scheduler". In : *CNSM 2018 - 14th International Conference on Network and Service Management*. Rome, Italy, novembre 2018. hal-01947552.
- [227] Pierre-Olivier BRISSAUD, Jerome FRANCOIS, Isabelle CHRISMENT, Thibault CHOZEZ et Olivier BETTAN. "Passive Monitoring of HTTPS Service Use". In : *CNSM'18 - 14th International Conference on Network and Service Management*. Rome, Italy, novembre 2018, p. 7. hal-01943936.
- [228] Paul CHAIGNON, Kahina LAZRI, Jerome FRANCOIS, Thibault DELMAS et Olivier FESTOR. "Oko : Extending Open vSwitch with Stateful Filters". In : *SOSR 2018 - ACM Symposium on SDN Research*. Los Angeles, United States, mars 2018, p. 1-13. hal-01939857.
- [229] Hayet CHENTLI, Rachid OUAFI et WAHIBA RAMDANE CHERIF-KHETTAFF. "Behaviour of a Hybrid ILS Heuristic on the Capacitated Profitable Tour Problem". In : *7th International Conference on Operations Research and Enterprise Systems*. T. 1. In Proceedings of the 7th International Conference on Operations Research and Enterprise Systems ISBN 978-989-758-285-1, ISSN 2184-4372. Funchal, Portugal : SCITEPRESS - Science and Technology Publications, janvier 2018, p. 115-123. DOI : [10.5220/0006630401150123](https://doi.org/10.5220/0006630401150123). hal-02982814.
- [230] Maxime COMPASTIÉ, Rémi BADONNEL, Olivier FESTOR et Ruan HE. "Demo : On-The-Fly Generation of Unikernels for Software-Defined Security in Cloud Infrastructures". In : *NOMS 2018 - IEEE/IFIP Network Operations and Management Symposium*. Taipei, Taiwan, avril 2018. DOI : [10.1109/NOMS.2018.8406131](https://doi.org/10.1109/NOMS.2018.8406131). hal-01798799.
- [231] Maxime COMPASTIÉ, Rémi BADONNEL, Olivier FESTOR, Ruan HE et Mohamed KASSI-LAHLOU. "Unikernel-based Approach for Software-Defined Security in Cloud Infrastructures". In : *NOMS 2018 - IEEE/IFIP Network Operations and Management Symposium*. Proceedings of the IEEE/IFIP Network Operations and Management Symposium. Taipei, Taiwan, avril 2018. DOI : [10.1109/NOMS.2018.8406155](https://doi.org/10.1109/NOMS.2018.8406155). hal-01798793.
- [232] Quang-Vinh DANG et Claudia-Lavinia IGNAT. "Link-Sign Prediction in Dynamic Signed Directed Networks". In : *CIC 2018 - 4th IEEE International Conference on Collaboration and Internet Computing*. Philadelphia, United States, octobre 2018. hal-01881035.

- [233] Giulia DE SANTIS, Abdelkader LAHMADI, Jérôme FRANÇOIS et Olivier FESTOR. "Internet-Wide Scanners Classification using Gaussian Mixture and Hidden Markov Models". In : *NTMS 2018 - 9th IFIP International Conference on New Technologies, Mobility and Security*. Paris, France, février 2018. [hal-01935664](#).
- [234] Abir ISMAILI-ALAOUI, Karim BAÏNA, Khalid BENALI et Jamal BAÏNA. "Towards Smart Incident Management Under Human Resource Constraints for an IoT-BPM Hybrid Architecture". In : *ICWS 2018 - 25th International Conference on Web Services*. Sous la dir. d'Hai JIN, Qingyang WANG et Liang-Jie ZHANG. T. 10966. Lecture Notes in Computer Science. Seattle, United States : Springer International Publishing, juin 2018, p. 457-471. DOI : [10.1007/978-3-319-94289-6\\_29](https://doi.org/10.1007/978-3-319-94289-6_29). [hal-01843095](#).
- [235] Nida KHAN, Abdelkader LAHMADI, Jérôme FRANÇOIS et Radu STATE. "Towards a management plane for smart contracts : Ethereum case study". In : *NOMS 2018 - IEEE/IFIP Network Operations and Management Symposium*. Taipei, Taiwan, avril 2018. DOI : [10.1109/NOMS.2018.8406326](https://doi.org/10.1109/NOMS.2018.8406326). [hal-01935669](#).
- [236] Tayeb Oulad KOUIDER, WAHIBA RAMDANE CHERIF-KHETTAF et Ammar OULAMARA. "Constructive Heuristics for Periodic Electric Vehicle Routing Problem". In : *7th International Conference on Operations Research and Enterprise Systems*. T. 1. Proceedings of the 7th International Conference on Operations Research and Enterprise Systems ISBN 978-989-758-285-1, ISSN 2184-4372. Funchal, Portugal : SCITEPRESS - Science and Technology Publications, janvier 2018, p. 264-271. DOI : [10.5220/0006630502640271](https://doi.org/10.5220/0006630502640271). [hal-02982813](#).
- [237] Béatrice LINOT, Jérôme DINET, François CHAROY et Valérie SHALIN. "Temporal Dispersion In Distributed Work". In : *IEA 2018 - 20th Congress of International Ergonomics Association*. Florence, Italy, août 2018. [halshs-01896434](#).
- [238] Mingxiao MA et Abdelkader LAHMADI. "On the Impact of Synchronization Attacks on Distributed and Cooperative Control in Microgrid Systems". In : *IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids*. Aalborg, Denmark, octobre 2018. [hal-01870771](#).
- [239] Hoang Long MAI, Messaoud AOUDJ, Guillaume DOYEN, Daishi KONDO, Xavier MARCHAL, Thibault CHOLEZ, Edgardo MONTES DE OCA et Wissam MALLOLU. "Implementation of Content Poisoning Attack Detection and Reaction in Virtualized NDN Networks". In : *ICIN 2018 - 21st Conference on Innovation in Clouds, Internet and Networks*. Paris, France, février 2018, p. 3. [hal-01907004](#).
- [240] Hoang Long MAI, Tan NGUYEN, Guillaume DOYEN, Rémi COGRANNE, Wissam MALLOLU, Edgardo Montes de OCA et Olivier FESTOR. "Towards a security monitoring plane for named data networking and its application against content poisoning attack". In : *NOMS 2018 - 2018 IEEE/IFIP Network Operations and Management Symposium*. Taipei, Taiwan : Institute of Electrical and Electronics Engineers (IEEE), 2018. DOI : [10.1109/noms.2018.8406246](https://doi.org/10.1109/noms.2018.8406246). [hal-02407659](#).
- [241] Xavier MARCHAL, Thibault CHOLEZ et Olivier FESTOR. " $\mu$ NDN : an Orchestrated Micro-service Architecture for Named Data Networking". In : *ACM-ICN'18 - 5th ACM Conference on Information-Centric Networking*. Boston, United States, septembre 2018, p. 12. DOI : [10.1145/3267955.3267961](https://doi.org/10.1145/3267955.3267961). [hal-01906996](#).

- [242] Xavier MARCHAL, Moustapha EL AOUN, Bertrand MATHIEU, Thibault CHOLEZ, Guillaume DOYEN, Wissam MALLOULI et Olivier FESTOR. “Leveraging NFV for the deployment of NDN : Application to HTTP traffic transport”. In : *NOMS 2018 - IEEE/IFIP Network Operations and Management Symposium*. Taipei, Taiwan : IEEE, avril 2018, p. 5. DOI : [10.1109/NOMS.2018.8406206](https://doi.org/10.1109/NOMS.2018.8406206). hal-01906994.
- [243] Hoang-Long NGUYEN, Jean-Philippe EISENBARTH, Claudia-Lavinia IGNAT et Olivier PERRIN. “Blockchain-Based Auditing of Transparent Log Servers”. In : *32th IFIP Annual Conference on Data and Applications Security and Privacy (DBSec)*. Sous la dir. de Florian KERSCHBAUM et Stefano PARABOSCHI. T. LNCS-10980. Data and Applications Security and Privacy XXXII. Part 1 : Administration. Bergamo, Italy : Springer International Publishing, juillet 2018, p. 21-37. DOI : [10.1007/978-3-319-95729-6\\_2](https://doi.org/10.1007/978-3-319-95729-6_2). hal-01917636.
- [244] Hoang-Long NGUYEN, Claudia-Lavinia IGNAT et Olivier PERRIN. “Trusternity : Auditing Transparent Log Server with Blockchain”. In : *Companion of the The Web Conference 2018*. Lyon, France, avril 2018. DOI : [10.1145/3184558.3186938](https://doi.org/10.1145/3184558.3186938). hal-01883589.
- [245] Thomas PARIS, Laurent CIARLETTA et Vincent CHEVRIER. “A component approach for DEVS”. In : *SummerSim'18 - Summer Simulation Multi-Conference 2018*. Proceedings of the 50th Computer Simulation Conference. Society for Computer Simulation International. Bordeaux, France, juillet 2018, p. 30. hal-01902778.
- [246] Thomas PARIS, Laurent CIARLETTA et Vincent CHEVRIER. “Une approche composant pour DEVS”. In : *JDF 2018 - Les Journées DEVS Francophones*. Cargèse, France, avril 2018. hal-01902758.
- [247] Guillaume ROSINOSKY, Chahrazed LABBA, Vincenzo FERME, Samir YOUSSEF, François CHAROY et Cesare PAUTASSO. “Evaluating Multi-Tenant Live Migrations Effects on Performance”. In : *CoopIS 2018 - 26th International Conference on Cooperative Information Systems*. Confederated International Conferences : CoopIS, C&TC, and ODBASE 2018, Valletta, Malta, October 22-26, 2018, Proceedings, Part I 11229. Valletta, Malta : Springer, octobre 2018, p. 16. hal-01870812.
- [248] Guillaume ROSINOSKY, Samir YOUSSEF et François CHAROY. “A Genetic Algorithm for Cost-Aware Business Processes Execution in the Cloud”. In : *ICSOC 2018 - The 16th International Conference on Service-Oriented Computing*. ICSOC 2018 : Service-Oriented Computing 11236. Hangzhou, China : Springer, novembre 2018, p. 14. hal-01870828.
- [249] Nicolas SCHNEPF, Rémi BADONNEL, Abdelkader LAHMADI et Stephan MERZ. “Generation of SDN policies for protecting Android environments based on automata learning”. In : *NOMS 2018 - IEEE/IFIP Network Operations and Management Symposium*. Proceedings of the IEEE/IFIP Network Operations and Management Symposium (IEEE/IFIP NOMS). Taipei, Taiwan : IEEE, avril 2018. DOI : [10.1109/NOMS.2018.8406153](https://doi.org/10.1109/NOMS.2018.8406153). hal-01892390.
- [250] Nicolas SCHNEPF, Rémi BADONNEL, Abdelkader LAHMADI et Stephan MERZ. “Synaptic : A formal checker for SDN-based security policies”. In : *NOMS 2018 - IEEE/IFIP Network Operations and Management Symposium*. Taipei, Taiwan : IEEE, avril 2018. DOI : [10.1109/NOMS.2018.8406122](https://doi.org/10.1109/NOMS.2018.8406122). hal-01892397.
- [251] Wazen M SHBAIR, Mathis STEICHEN, Jerome FRANCOIS et Radu STATE. “Blockchain orchestration and experimentation framework : A case study of KYC”. In : *IEEE/IFIP Man2Block 2018 - IEEE/IFIP Network Operations and Management Symposium*. Taipei, Taiwan, avril 2018. hal-01939865.

- [252] Mehdi ZAKROUM, Abdellah HOUMZ, Mounir GHOGHO, Ghita MEZZOUR, Abdelkader LAHMADI, Jerome FRANCOIS et Mohammed El KOUTBI. "Exploratory Data Analysis of a Network Telescope Traffic and Prediction of Port Probing Rates". In : *ISI 2018 - IEEE Intelligence and Security Informatics*. Miami, United States, novembre 2018. [hal-01947984](#).
- [253] Ahmad ADDOUM, Sylvain CONTASSOT-VIVIER et Fatmir ASLLANAJ. "Anisotropy factor reconstruction as a new endogenous contrast for cancer diagnosis with optical tomography". In : *Optical Tomography and Spectroscopy of Tissue XIII*. San Francisco, France : SPIE, février 2019, p. 68. DOI : [10.1117/12.2507418](https://doi.org/10.1117/12.2507418). [hal-03522823](#).
- [254] NORHANE BENKAHLA, hajer tounsi hajer, Yeqiong SONG et Mounir FRIKHA. "Enhanced ADR for LoRaWAN networks with mobility". In : *2019 15th International Wireless Communications & Mobile Computing Conference (IWCMC)*. IEEE. Tanger, Morocco : IEEE, juin 2019, p. 1-6. DOI : [10.1109/IWCMC.2019.8766738](https://doi.org/10.1109/IWCMC.2019.8766738). [hal-02975202](#).
- [255] Maxime COMPASTIÉ, Rémi BADONNEL, Olivier FESTOR et Ruan HE. "A TOSCA-Oriented Software-Defined Security Approach for Unikernel-Based Protected Clouds". In : *NetSoft 2019 - IEEE Conference on Network Softwarization*. Paris, France : IEEE, juin 2019, p. 151-159. DOI : [10.1109/NETSOFT.2019.8806623](https://doi.org/10.1109/NETSOFT.2019.8806623). [hal-02271520](#).
- [256] Sylvain CONTASSOT-VIVIER, Jean-François COUCHOT, Mohammed BAKIRI et Pierre-Cyrille HEAM. "Fast and robust PRNGs based on jumps in N-cubes for simulation, but not exclusively for that." In : *The 2019 International Conference on High Performance Computing & Simulation*. Dublin, Ireland, juillet 2019. [hal-02301248](#).
- [257] Virgile DAUGÉ, Sylvain CONTASSOT-VIVIER et Laurent CIARLETTA. "NAPS : a Nomadic and Accurate Positioning System". In : *Aerial Swarms / IROS 2019*. Macau, China, novembre 2019. [hal-02384704](#).
- [258] Théo DOCQUIER, Ye-Qiong SONG, Vincent CHEVRIER, Ludovic PONTNAU et Abdelaziz AHMED-NACER. "Generating substation network simulations from substation configuration description files". In : *13th Junior Researcher Workshop on Real-Time Computing (JRRTC)*. Toulouse, France, novembre 2019. [hal-02971306](#).
- [259] Laurent EVRARD, Jérôme FRANÇOIS et Jean-Noël COLIN. "Attacker Behavior-Based Metric for Security Monitoring Applied to Darknet Analysis". In : *IM 2019 - The 16th IFIP/IEEE Symposium on Integrated Network and Service Management*. Washington DC, United States, avril 2019. [hal-02345457](#).
- [260] Laurent EVRARD, Jérôme FRANÇOIS, Jean-Noël COLIN et Frédéric BECK. "port2dist : Semantic Port Distances for Network Analytics". In : *IM 2019 - The 16th IFIP/IEEE Symposium on Integrated Network and Service Management - Demo session*. Washington DC, United States, avril 2019. [hal-02345491](#).
- [261] Sonia HADDAD-VANIER, Céline GICQUEL, Lila BOUKHATEM, Kahina LAZRI et Paul CHAIGNON. "Virtual network functions placement for defense against distributed denial of service attacks". In : *ICORES 2019 - 8th International Conference on Operations Research and Enterprise Systems*. Prague, Czech Republic, février 2019. [hal-02421693](#).
- [262] Benoît HENRY, Shihabur Rahman CHOWDHURY, Abdelkader LAHMADI, Romain AZAÏS, Jérôme FRANÇOIS et Raouf BOUTABA. "SPONGE : Software-Defined Traffic Engineering to Absorb Influx of Network Traffic". In : *LCN 2019 - 44th IEEE Conference on Local Computer Networks*. Osnabrück, Germany, octobre 2019. [hal-02403616](#).

- [263] Pierre-Marie JUNGES, Jerome FRANCOIS et Olivier FESTOR. "Passive Inference of User Actions through IoT Gateway Encrypted Traffic Analysis". In : *IM 2019 - The 16th IFIP/IEEE Symposium on Integrated Network and Service Management*. Washington DC, United States, avril 2019. [hal-02331783](#).
- [264] Tayeb KOUIDER, WAHIBA RAMDANE CHERIF-KHETTAF et Ammar OULAMARA. "Large Neighborhood Search for Periodic Electric Vehicle Routing Problem". In : *8th International Conference on Operations Research and Enterprise Systems*. T. 1. Proceedings of the 8th International Conference on Operations Research and Enterprise Systems. Prague, Czech Republic : SCITEPRESS - Science and Technology Publications, février 2019, p. 169-178. DOI : [10.5220/0007409201690178](https://doi.org/10.5220/0007409201690178). [hal-02982812](#).
- [265] Sofiane LAGRAA, Maxime CAILAC, Sean RIVERA, Frédéric BECK et Radu STATE. "Real-time attack detection on robot cameras : A self-driving car application". In : *IEEE IRC 2019 - Third IEEE International Conference on Robotic Computing*. Naples, Italy, février 2019. [hal-02063304](#).
- [266] Mingxiao MA, Abdelkader LAHMADI et Isabelle CHRISMENT. "Demonstration of Synchronization Attacks on Distributed and Cooperative Control in Microgrids". In : *IM 2019 - The 16th IFIP/IEEE Symposium on Integrated Network and Service Management*. Washington DC, United States, avril 2019. [hal-02389307](#).
- [267] Hoang-Long MAI, Messaoud AOUDJ, Guillaume DOYEN, Wissam MALLOULI, Edgardo MONTES DE OCA et Olivier FESTOR. "Toward Content-Oriented Orchestration : SDN and NFV as Enabling Technologies for NDN". In : *IM 2019 - The 16th IFIP/IEEE Symposium on Integrated Network and Service Management*. Washington DC, United States : IEEE, avril 2019. [hal-02274785](#).
- [268] Lakhdar MEFTAH, Romain ROUVOY et Isabelle CHRISMENT. "FOUGERE : User-Centric Location Privacy in Mobile Crowdsourcing Apps". In : *DAIS 2019 - 19th IFIP International Conference on Distributed Applications and Interoperable Systems*. Sous la dir. de José PEREIRA et Laura RICCI. T. 11534. Distributed Applications and Interoperable Systems. Kongens Lyngby, Denmark : Springer International Publishing, juin 2019, p. 116-132. DOI : [10.1007/978-3-030-22496-7\\_8](https://doi.org/10.1007/978-3-030-22496-7_8). [hal-02121311](#).
- [269] Lakhdar MEFTAH, Romain ROUVOY et Isabelle CHRISMENT. "Testing Nearby Peer-to-Peer Mobile Apps at Large". In : *MOBILESoft 2019 - 6th IEEE/ACM International Conference on Mobile Software Engineering and Systems*. Sous la dir. de Denys POSHYVANYK et Ivano MALAVOLTA. Montréal, Canada, mai 2019. [hal-02059088](#).
- [270] Enrico NATALIZIO, Nicola Roberto ZEMA, Luigi DI PUGLIA PUGLIESE et Francesca GUERRIERO. "Download and Fly : An Online Solution for the UAV 3D Trajectory Planning Problem in Smart Cities". In : *DIVANet '19 : Proceedings of the 9th ACM Symposium on Design and Analysis of Intelligent Vehicular Networks and Applications*. ACM. Miami Beach, United States : ACM Press, novembre 2019, p. 49-56. DOI : [10.1145/3345838.3356012](https://doi.org/10.1145/3345838.3356012). [hal-02993098](#).
- [271] Thomas PARIS, Jean-Baptiste WIART, Denis NETTER et Vincent CHEVRIER. "Teaching co-simulation basics through practice". In : *2019 SUMMER SIMULATION CONFERENCE*. Berlin, Germany, juillet 2019. [hal-02268350](#).
- [272] Pierre ROLIN, Denis MOALIC, Rémi BADONNEL, Olivier BERGER et Jihane FOUZAI. "A collection of MOOCs to create digital programs". In : *OOFHEC 2019 : the Online, Open and Flexible Higher Education Conference*. Madrid, Spain, octobre 2019, p. 86-99. [hal-02398007](#). URL : <https://conference.eadtu.eu/download2527>.

- [273] Nicolas SCHNEPF, Rémi BADONNEL, Abdelkader LAHMADI et Stephan MERZ. "A Tool Suite for the Automated Synthesis of Security Function Chains". In : *IFIP/IEEE IM 2019 - IFIP/IEEE International Symposium on Integrated Network Management*. Washington, United States, avril 2019. [hal-02111658](#).
- [274] Nicolas SCHNEPF, Rémi BADONNEL, Abdelkader LAHMADI et Stephan MERZ. "Automated Factorization of Security Chains in Software-Defined Networks". In : *IFIP/IEEE IM 2019 - IFIP/IEEE International Symposium on Integrated Network Management*. Washington, United States, avril 2019. [hal-02111656](#).
- [275] Wazen M SHBAIR, Mathis STEICHEN, Jérôme FRANÇOIS et Radu STATE. "BlockZoom : Large-Scale Blockchain Testbed". In : *ICBC 2019 - IEEE International Conference on Blockchain and Cryptocurrency - Demo*. Seoul, South Korea : IEEE, mai 2019, p. 5-6. DOI : [10.1109/BLOC.2019.8751230](#). [hal-02403717](#).
- [276] Karima SMIDA, Hajar TOUNSI, Mounir FRIKHA et Ye-Qiong SONG. "Delay Study in Multi-controller Software Defined Vehicular Network Using OpenDaylight for Emergency Applications". In : *2019 15th International Wireless Communications and Mobile Computing Conference (IWCMC)*. Tangier, Morocco : IEEE, juin 2019, p. 615-620. DOI : [10.1109/IWCMC.2019.8766633](#). [hal-02974777](#).
- [277] Karima SMIDA, Hajar TOUNSI, Mounir FRIKHA et Ye-Qiong SONG. "Software Defined Internet of Vehicles : a survey from QoS and scalability perspectives". In : *2019 15th International Wireless Communications and Mobile Computing Conference (IWCMC)*. Tangier, Morocco : IEEE, juin 2019, p. 1349-1354. DOI : [10.1109/IWCMC.2019.8766647](#). [hal-02974790](#).
- [278] Angelo TROTTA, Marco DI FELICE, Luciano BONONI, Enrico NATALIZIO, Luca PERILLI, Eleonora Franchi SCARSELLI, Tullio Salmon CINOTTI et Roberto CANEGALLO. "BEE-DRONES : Energy-efficient Data Collection on Wake-Up Radio-based Wireless Sensor Networks". In : *IEEE INFOCOM 2019 - IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS)*. Paris, France : IEEE, avril 2019, p. 547-553. DOI : [10.1109/INFCOMW.2019.8845046](#). [hal-02993083](#).
- [279] Louis VIARD, Laurent CIARLETTA et Pierre-Etienne MOREAU. "Monitor-Centric Mission Definition with Sophrosyne". In : *ICUAS -2019 International Conference on Unmanned Aircraft Systems*. Atlanta, United States, juin 2019. [hal-02170193](#).
- [280] Alexandru VULPE, Ali PAIKAN, Razvan CRACIUNESCU, Pouyan ZIAFATI, Sofoklis KYRIAZAKOS, Adrien HEMMER et Remi BADONNEL. "IoT Security Approaches in Social Robots for Ambient Assisted Living Scenarios". In : *The 22nd International Symposium on Wireless Personal Multimedia Communications*. Lisbon, Portugal, novembre 2019. [hal-02402950](#).
- [281] Weihai YU, Victorien ELVINGER et Claudia-Lavinia IGNAT. "A Generic Undo Support for State-Based CRDTs". In : *OPODIS 2019 - Proceedings of 23rd International Conference on Principles of Distributed Systems*. Neuchâtel, Switzerland, décembre 2019. DOI : [10.4230/LIPIcs.OPODIS.2019.14](#). [hal-02370231](#).
- [282] Nicola Roberto ZEMA, Mirwaisse DJANBAZ, Dominique QUADRI, Steven MARTIN, Enrico NATALIZIO et Omar SHRIT. "Contrôle de formation d'un réseau de drones à base d'apprentissage par renforcement". In : *Rencontres Francophones sur la Conception de Protocoles, l'Évaluation de Performance et l'Expérimentation des Réseaux de Communication*. Narbonne, France, juin 2019. [hal-02128006](#).

- [283] Hernan ABAUNZA, Pedro CASTILLO GARCIA, Didier THEILLIOL, Adel BELKADI et Laurent CIARLETTA. "Cylindrical bounded quaternion control for tracking and surrounding a ground target using UAVs". In : *21st International Federation of Automatic Control World Congress (IFAC WC 2020)*. Berlin, Germany, juillet 2020. [hal-02568304](#).
- [284] Ahmad ABOUD, Rémi GARCIA, Abdelkader LAHMADI, Michaël RUSINOWITCH et Adel BOUHOULA. "Efficient Distribution of Security Policy Filtering Rules in Software Defined Networks". In : *NCA 2020 - 19th IEEE International Symposium on Network Computing and Applications*. Online conference, France, novembre 2020. [hal-03036350](#).
- [285] Sèmèvo Arnaud R. M. AHOUANDJINOU, Aldric MONNOU, Firmin YELOUASSI et Emmanuel NATAF. "Smart Wireless network for data collection using mobile Sink embedded on drone based on a modified RPL-version". In : *2020 International Symposium on Networks, Computers and Communications (ISNCC) : Smart Cities and the Internet of Everything (ISNCC-2020 SC-IoE)*. Montreal, Canada, octobre 2020. [hal-02974947](#).
- [286] Vincent CHEVRIER, Jean-Baptiste WIART et Thomas PARIS. "Agents and Simulation". In : *JFMS 2020 - Journée Française de la Modélisation et Simulation*. Cargèse, France, novembre 2020. [hal-02972201](#).
- [287] Theo DOCQUIER, Ye-Qiong SONG, Vincent CHEVRIER, Ludovic PONTNAU et Abdelaziz AHMED-NACER. "IEC 61850 over TSN : traffic mapping and delay analysis of GOOSE traffic". In : *2020 25th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA)*. Vienna, Austria : IEEE, septembre 2020, p. 246-253. DOI : [10.1109/ETFA46521.2020.9212159](https://doi.org/10.1109/ETFA46521.2020.9212159). [hal-02971290](#).
- [288] Théo DOCQUIER, Ye-Qiong SONG, Vincent CHEVRIER, Ludovic PONTNAU et Abdelaziz AHMED-NACER. "Determining a tight worst-case delay of switched Ethernet network in IEC 61850 architectures". In : *45th IEEE Conference on Local Computer Networks (LCN)*. Sydney, Australia, novembre 2020. [hal-02971311](#).
- [289] David ESPINEL SARMIENTO, Adrien LEBRE, Lucas NUSSBAUM et Abdelhadi CHARI. "Multi-site Connectivity for Edge Infrastructures DIMINET:DIstributed Module for Inter-site NETworking". In : *CCGRID 2020 : 20th IEEE/ACM International Symposium on Cluster, Cloud and Internet Computing*. IEEE and The University of Melbourne. Melbourne, Australia, mai 2020, p. 1-10. DOI : [10.1109/CCGrid49817.2020.00-81](https://doi.org/10.1109/CCGrid49817.2020.00-81). [hal-02573638](#).
- [290] Jérôme FRANÇOIS, Alexander CLEMM, Vivien MAINTENANT et Sébastien TABOR. "BPP over P4 : Exploring Frontiers and Limits in Programmable Packet Processing". In : *IEEE Global Communications Conference*. IEEE Global Communications Conference 2020. Taipei, Taiwan, décembre 2020. [hal-03032566](#).
- [291] Adrien HEMMER, Remi BADONNEL et Isabelle CHRISMENT. "A Process Mining Approach for Supporting IoT Predictive Security". In : *NOMS 2020 - IEEE/IFIP Network Operations and Management Symposium*. Budapest, Hungary, avril 2020. [hal-02402986](#).
- [292] Adrien HEMMER, Remi BADONNEL, Jérôme FRANÇOIS et Isabelle CHRISMENT. "A Process Mining Tool for Supporting IoT Security". In : *NOMS 2020 - IEEE/IFIP Network Operations and Management Symposium*. Budapest, Hungary, avril 2020. [hal-02625712](#).
- [293] Nida KHAN, Abdelkader LAHMADI, Zsophia KRÄUSSL et Radu STATE. "Management plane for differential privacy preservation through smart contracts". In : *AICCSA 2020 - 17th ACS/IEEE International Conference on Computer Systems and Applications*. Antalya / Virtual, Turkey, novembre 2020. [hal-03088227](#).

- [294] Abir LARABA, Jérôme FRANÇOIS, Isabelle CHRISMENT, Shihabur Rahman CHOWDHURY et Raouf BOUTABA. "Defeating Protocol Abuse with P4 : Application to Explicit Congestion Notification". In : *2020 IFIP Networking Conference (Networking)*. Paris, France, juin 2020. [hal-02993199](#).
- [295] Mingxiao MA, Abdelkader LAHMADI et Isabelle CHRISMENT. "Detecting a Stealthy Attack in Distributed Control for Microgrids using Machine Learning Algorithms". In : *3rd IEEE International Conference on Industrial Cyber-Physical Systems (ICPS)*. Tampere (online), Finland, juin 2020. [hal-02980115](#).
- [296] Lakhdar MEFTAH, Romain ROUVOY et Isabelle CHRISMENT. "Capturing Privacy-preserving User Contexts with IndoorHash". In : *DAIS 2020 - 20th IFIP International Conference on Distributed Applications and Interoperable Systems*. Sous la dir. d'Anne REMKE et Valerio SCHIAVONI. T. 12135. Valletta, Malta, juin 2020. DOI : [10.1007/978-3-030-50323-9\\_2](https://doi.org/10.1007/978-3-030-50323-9_2). [hal-02541391](#).
- [297] Mohamed SAID FRIKHA, Abdelkader LAHMADI, Sonia METTALI GAMMAR et Laurent ANDREY. "Leveraging Reinforcement Learning for Adaptive Monitoring of Low-Power IoT Networks". In : *The 16th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob2020)*. Thessaloniki (Virtual), Greece, octobre 2020. [hal-02980094](#).
- [298] Weihai YU et Claudia-Lavinia IGNAT. "Conflict-Free Replicated Relations for Multi-Synchronous Database Management at Edge". In : *IEEE International Conference on Smart Data Services, 2020 IEEE World Congress on Services*. Beijing, China, octobre 2020. [hal-02983557](#).
- [299] NORHANE BENKAHLA, Hajar TOUNSI, Mounir FRIKHA et Ye-Qiong SONG. "VHMM-based E-ADR for LoRaWAN networks with unknown mobility patterns". In : *IWCWC 2021 - 17th Int. Wireless Communications & Mobile Computing Conference*. Herbin, China, juin 2021. [hal-03283215](#).
- [300] Shihabur Rahman CHOWDHURY, Raouf BOUTABA et Jérôme FRANÇOIS. "LINT : Accuracy-adaptive and Lightweight In-band Network Telemetry". In : *IM 2021 - 17th IFIP/IEEE International Symposium on Integrated Network Management*. 2021 IFIP/IEEE International Symposium on Integrated Network Management (IM). Bordeaux / Virtual, France, mai 2021. [hal-03525026](#).
- [301] Jean-Philippe EISENBARTH, Thibault CHOLESZ et Olivier PERRIN. "A Comprehensive Study of the Bitcoin P2P Network". In : *BRAINS 2021 - 3rd Conference on Blockchain Research & Applications for Innovative Networks and Services*. Paris/ Virtuel, France : IEEE, septembre 2021, p. 8. [hal-03380595](#).
- [302] Jean-Philippe EISENBARTH, Thibault CHOLESZ et Olivier PERRIN. "An open measurement dataset on the Bitcoin P2P Network". In : *IM 2021 - 17th IFIP/IEEE International Symposium on Integrated Network Management*. Bordeaux / Virtual, France, mai 2021, p. 5. [hal-03244771](#).
- [303] Adrien HEMMER, Mohamed ABDERRAHIM, Remi BADONNEL et Isabelle CHRISMENT. "An Ensemble Learning-Based Architecture for Security Detection in IoT Infrastructures". In : *CNSM 2021 - 17th International Conference on Network and Service Management*. Izmir (Virtual), Turkey, octobre 2021. [hal-03460779](#).

- [304] Claudia-Lavinia IGNAT et Quang-Vinh DANG. "Users trust assessment based on their past behavior in large scale collaboration". In : *ICCP 2021 - IEEE 17th International Conference on Intelligent Computer Communication and Processing*. Cluj-Napoca/Online, Romania, octobre 2021. [hal-03469344](#).
- [305] Atef JABALLAH et WAHIBA RAMDANE CHERIF-KHETTAF. "Multi-trip pickup and delivery problem, with split loads, profits and multiple time windows to model a real case problem in the constructionindustry". In : *10th International Conference on Operations Research and Enterprise Systems (ICORES)*. T. Volume 1- ICORES. ISBN : 978-989-758-485-5. Online streaming, France, février 2021. DOI : [10.5220/001025300200207](#). [hal-02985164](#).
- [306] Matthews JOSE, Kahina LAZRI, Jérôme FRANÇOIS et Olivier FESTOR. "InREC : In-network REal Number Computation". In : *IM 2021 - 17th IFIP/IEEE International Symposium on Integrated Network Management*. 2021 IFIP/IEEE International Symposium on Integrated Network Management (IM). Bordeaux / Virtual, France, mai 2021. [hal-03525052](#).
- [307] Pierre-Marie JUNGES, Jérôme FRANÇOIS et Olivier FESTOR. "Inferring Software Composition and Credentials of Embedded Devices from Partial Knowledge". In : *CNSM 2021 - 17th International Conference on Network and Service Management*. Izmir/virtual, Turkey, octobre 2021. [hal-03470012](#).
- [308] Pierre-Marie JUNGES, Jérôme FRANÇOIS et Olivier FESTOR. "Software-based Analysis of the Security by Design in Embedded Devices". In : *IM 2021 - 17th IFIP/IEEE International Symposium on Integrated Network Management*. Bordeaux / Virtual, France, mai 2021. [hal-03469993](#).
- [309] Debashisha MISHRA, Angelo TROTTA, Marco DI FELICE et Enrico NATALIZIO. "Performance Analysis of Multi-hop Communication based on 5G Sidelink for Cooperative UAV Swarms". In : *2021 IEEE International Mediterranean Conference on Communications and Networking (MeditCom)*. 2021 IEEE International Mediterranean Conference on Communications and Networking (MeditCom). Athens, Greece : IEEE, septembre 2021, p. 395-400. DOI : [10.1109/MeditCom49071.2021.9647449](#). [hal-03541531](#).
- [310] Mohamed OULAAFFART, Remi BADONNEL et Olivier FESTOR. "Towards Automating Security Enhancement for Cloud Services". In : *IM 2021 - 17th IFIP/IEEE International Symposium on Integrated Network Management*. Lyon / Virtuel, France, mai 2021. [hal-03454868](#).
- [311] Sara RICCI, Vladimir JANOUT, Simon PARKER, Jan JERABEK, Jan HAJNY, Argyro CHATZOPOULOU et Remi BADONNEL. "PESTLE Analysis of Cybersecurity Education". In : *ARES 2021 - 16th International Conference on Availability, Reliability and Security*. Vienna, Austria : ACM, août 2021, p. 1-8. DOI : [10.1145/3465481.3469184](#). [hal-03518393](#).
- [312] Guillaume ROSINOSKY, Samir YOUSSEF, François CHAROY et Etienne RIVIÈRE. "A methodology for tenant migration in legacy shared-table multi-tenant applications". In : *DAIS 2021 - 21th IFIP International Conference on Distributed Applications and Interoperable Systems*. Sous la dir. de Miguel MATOS et Fabíola GREVE. T. LNCS-12718. Distributed Applications and Interoperable Systems. Valetta, Malta : Springer International Publishing, juin 2021, p. 3-20. [hal-03381116](#).

## Autre conférences internationales

- [313] Clarence A. ELLIS et Simon J. GIBBS. "Concurrency Control in Groupware Systems". In : *Proceedings of the ACM SIGMOD Conference on the Management of Data - SIGMOD 89*. Portland, Oregon, USA, mai 1989, p. 399-407. URL : <http://doi.acm.org/10.1145/67544.66963>.
- [314] Gérald OSTER, Pascal URSO, Pascal MOLLI et Abdessamad IMINE. "Data Consistency for P2P Collaborative Editing". In : *ACM Conference on Computer-Supported Cooperative Work - CSCW 2006*. Banff, Alberta, Canada : ACM Press, novembre 2006, p. 259-268.
- [315] Nuno PREGUIÇA, Joan Manuel MARQUÈS, Marc SHAPIRO et Mihai LETIA. "A commutative replicated data type for cooperative editing". In : *29th IEEE International Conference on Distributed Computing Systems (ICDCS 2009)*. Montreal, Québec Canada : IEEE Computer Society, 2009, p. 395-403. DOI : <10.1109/ICDCS.2009.20>. [inria-00445975](#).
- [316] Stéphane WEISS, Pascal URSO et Pascal MOLLI. "Logoot : A Scalable Optimistic Replication Algorithm for Collaborative Editing on P2P Networks". In : *29th IEEE International Conference on Distributed Computing Systems - ICDCS 2009*. Montreal, Canada : IEEE, juin 2009, p. 404-412. DOI : <10.1109/ICDCS.2009.75>. [inria-00432368](#).
- [317] Luc ANDRÉ, Stéphane MARTIN, Gérald OSTER et Claudia-Lavinia IGNAT. "Supporting Adaptable Granularity of Changes for Massive-scale Collaborative Editing". In : *CollaborateCom - 9th IEEE International Conference on Collaborative Computing : Networking, Applications and Worksharing - 2013*. Austin, United States, octobre 2013.
- [318] Kahina BESSAI, Samir YOUSSEF, Claude GODART, Selmin NURCAN et Ammar OULAMARA. "Business Process scheduling strategies in Cloud environments with fairness metrics". In : *SCC - IEEE International Conference on Services Computing - 2013*. Santa Clara, United States : IEEE, juin 2013, p. 519-526. DOI : <10.1109/SCC.2013.94>. [hal-00920349](#).
- [319] Quoc V. LE et Tomas MIKOLOV. "Distributed Representations of Sentences and Documents". In : *ICML*. T. 32. JMLR Workshop and Conference Proceedings. JMLR.org, 2014, p. 1188-1196.
- [320] Marcela S MELARA, Aaron BLANKSTEIN, Joseph BONNEAU, Edward W FELTEN et Michael J FREEDMAN. "CONIKS : Bringing key transparency to end users". In : *24th USENIX Security Symposium (USENIX Security 15)*. 2015, p. 383-398.
- [321] Elian AUBRY, Thomas SILVERSTON et Isabelle CHRISMENT. "Croissance Verte dans NDN : Déploiement des Content Stores". In : *ALGOTEL 2016 - 18èmes Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications*. ALGOTEL 2016 - 18èmes Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications. Bayonne, France, mai 2016. [hal-01304444](#).
- [322] Adel BELKADI, Laurent CIARLETTA et Didier THEILLIOL. "UAVs fleet control design using distributed particle swarm optimization : A leaderless approach". In : *International Conference on Unmanned Aircraft Systems, ICUAS 2016*. Arlington, VA, United States, juin 2016, p. 364-371. DOI : <10.1109/ICUAS.2016.7502679>. [hal-01382063](#).
- [323] Adel BELKADI, Didier THEILLIOL, Laurent CIARLETTA et Jean-Christophe PONSART. "Robust flocking control design for a fleet of autonomous agents". In : *3rd Conference on Control and Fault-Tolerant Systems, SysTol 2016*. Barcelone, Spain, septembre 2016. [hal-01348138](#).

- [324] Slim BEN-AMOR, Dorin MAXIM et Liliana CUCU-GROSJEAN. "Schedulability analysis of dependent probabilistic real-time tasks". In : *RTNS 2016 - 24th International Conference on Real-Time Networks and Systems*. Brest, France, octobre 2016, p. 99-107. DOI : [10.1109/RTNS465.2016.7500749](https://doi.org/10.1109/RTNS465.2016.7500749). hal-01419741.
- [325] Kahina BESSAI et François CHAROY. "Business process tasks-assignment and resource-allocation in Crowdsourcing context". In : *IEEE International Conference on Collaboration and Internet Computing*. Pittsburgh, United States, novembre 2016. hal-01401246.
- [326] Kahina BESSAI et François CHAROY. "Optimization of Orchestration of Geocrowdsourcing Activities". In : *Third International Conference on Information Systems for Crisis Response and Management in Mediterranean Countries (ISCRAM-med 2016)*. Lecture Notes in Business Information Processing. Madrid, Spain : Springer, octobre 2016. hal-01356053.
- [327] Joseph BONNEAU. "EthIKS : Using Ethereum to audit a CONIKS key transparency log". In : *International Conference on Financial Cryptography and Data Security*. Springer. 2016, p. 95-105.
- [328] Benjamin CAMUS, Virginie GALTIER, Mathieu CAUJOLLE, Vincent CHEVRIER, Julien VAUBOURG, Laurent CIARLETTA et Christine BOURJOT. "Hybrid Co-simulation of FMUs using DEV&DESS in MECSYCO". In : *Symposium on Theory of Modeling & Simulation - DEVS Integrative M&S Symposium*. Proceedings of the Symposium on Theory of Modeling & Simulation - DEVS Integrative M&S Symposium (TMS/DEVS 16), SCS/ACM (2016). Pasadena, CA, United States, avril 2016, p. 568-575. hal-01307616.
- [329] Marc COUDRIAU, Abdelkader LAHMADI et Jerome FRANCOIS. "Topological Analysis and Visualisation of Network Monitoring Data : Darknet case study". In : *8th IEEE International Workshop on Information Forensics and Security - WIFS 2016*. Information Forensics and Security. Abu Dhabi, United Arab Emirates : IEEE, décembre 2016. hal-01403950.
- [330] Quang-Vinh DANG et Claudia-Lavinia IGNAT. "Performance of real-time collaborative editors at large scale : User perspective". In : *Internet of People Workshop, 2016 IFIP Networking Conference*. Proceedings of 2016 IFIP Networking Conference, Networking 2016 and Workshops. Vienna, Austria, mai 2016, p. 548-553. DOI : [10.1109/IFIPNetworking.2016.7497258](https://doi.org/10.1109/IFIPNetworking.2016.7497258). hal-01351229.
- [331] Jérôme FRANÇOIS, Abdelkader LAHMADI, Valentin GIANNINI, Damien CUPIF, Frédéric BECK et Bertrand WALLRICH. "Optimizing Internet Scanning for Assessing Industrial Systems Exposure". In : *7th International Workshop on TRaffic Analysis and Characterization*. TRAC 2016 - 7th International Workshop on TRaffic Analysis and Characterization. Paphos, Cyprus, septembre 2016. DOI : [10.1109/IWCMC.2016.7577111](https://doi.org/10.1109/IWCMC.2016.7577111). hal-01371674.
- [332] Dorin I MAXIM, Robert DAVIS, Liliana CUCU-GROSJEAN et Arvind EASWARAN. "Probabilistic Analysis for Mixed Criticality Scheduling with SMC and AMC". In : *WMC 2016 - 4th International Workshop on Mixed Criticality Systems*. Porto, Portugal, novembre 2016. hal-01416310.
- [333] Amina Ahmed NACER, Elio GOETTELmann, Samir YOUSSEF, Abdelkamel TARI et Claude GODART. "Obfuscating a Business Process by Splitting Its Logic with Fake Fragments for Securing a Multi-cloud Deployment". In : *IEEE Congress On Services*. Services (SERVICES), 2016 IEEE World Congress on. SanFrancisco, United States, juin 2016, p. 18-25. DOI : [10.1109/SERVICES.2016.9](https://doi.org/10.1109/SERVICES.2016.9). hal-01399380.

- [334] Lucas NUSSBAUM. "Towards reproducibility of experiments". In : *Grid'5000 Winter School 2016 – Grid'5000 Scientific Advisory Board meeting*. Grenoble, France, février 2016. [hal-01274293](#).
- [335] Tayeb OULAD KOUIDER, Wahiba RAMDANE CHERIF- KHETTAF et Ammar OULAMARA. "Tournées de véhicules électriques avec flotte mixte et chargement partiel". In : *ROADEF 2016, 10-12 février, Compiègne*. Compiègne, France, février 2016. [hal-01307637](#).
- [336] Guillaume ROSINOSKY, Samir YOUSSEF et François CHAROY. "A Framework for BPMS Performance and Cost Evaluation on the Cloud". In : *Workshop "Business Process Monitoring and Performance Analysis in the Cloud"*. IEEE CloudCom. Luxembourg, Luxembourg, décembre 2016. [hal-01379167](#).
- [337] Guillaume ROSINOSKY, Samir YOUSSEF et François CHAROY. "An Efficient Approach for Multi-tenant Elastic Business Processes Management in Cloud Computing environment". In : *IEEE Cloud 2016 - 9th IEEE International Conference on Cloud Computing*. San Francisco, United States, juin 2016. [hal-01355125](#).
- [338] Kévin ROUSSEL, Ye-Qiong SONG et Olivier ZENDRA. "Using Cooja for WSN Simulations : Some New Uses and Limits". In : *EWSN 2016 - NextMote workshop*. Sous la dir. de Kay ROEMER. EWSN 2016 - NextMote workshop. ACM. Graz, Austria : Junction Publishing, février 2016, p. 319-324. [hal-01240986](#).
- [339] Wazen M. SHBAIR, Thibault CHOLEZ, Jérôme FRANÇOIS et Isabelle CHRISMENT. "Improving SNI-based HTTPS Security Monitoring". In : *Second IEEE International Workshop on Security Testing and Monitoring*. ICDCS 2016 - Workshops of the 36th IEEE International Conference on Distributed Computing Systems. Nara, Japan : IEEE, juin 2016, p. 6. [hal-01349710](#).
- [340] Salvatore SIGNORELLO, Radu STATE, Jerome FRANCOIS et Olivier FESTOR. "NDN.p4 : Programming Information-Centric Data-Planes". In : *International Workshop on Open-Source Software Networking (OSSN), IEEE International Conference on Network Standardization*. Seoul, South Korea, juin 2016. [hal-01310575](#).
- [341] Sven VALLÉE, Wahiba RAMDANE CHERIF- KHETTAF et Ammar OULAMARA. "Algorithme d'optimisation adaptatif pour un service de mobilité intégré". In : *ROADEF 2016*. Compiègne, France, février 2016. [hal-01307644](#).
- [342] Julien VAUBOURG, Vincent CHEVRIER, Laurent CIARLETTA et Benjamin CAMUS. "Co-Simulation of IP Network Models in the Cyber-Physical Systems Context, using a DEVS-based Platform". In : *Communications and Networking Simulation Symposium*. Proceedings of the Communications and Networking Simulation Symposium. Pasadena, United States : ACM, 2016. [hal-01256907](#).
- [343] Stéphane VIALLE, Sylvain CONTASSOT-VIVIER et Patrick MERCIER. "Generic algorithmic scheme for 2D stencil applications on hybrid machines". In : *ARCS 2016 - Architecture of Computing Systems*. Nuremberg, Germany, avril 2016. [hal-01263242](#).
- [344] John WIETING, Mohit BANSAL, Kevin GIMPEL et Karen LIVESCU. "Towards Universal Paraphrastic Sentence Embeddings". In : *4th International Conference on Learning Representations (ICLR 2016)*. Sous la dir. d'Yoshua BENGIO et Yann LECUN. arXiv : [1511.08198](#). San Juan, Puerto Rico, 2-4 mai 2016. arXiv : [1511.08198](#).
- [345] Ahmad ABOUD, Oussama HABACHI, Ali JABER, Jean-Pierre CANCES et Vahid MEGHDADI. "Channel Coherence Classification with Frame-Shifting in Massive MIMO Systems". In : *UNET*. Casablanca, Morocco, France : IEEE, mai 2017, p. 425-437. DOI : [10.1109/978-3-319-68179-5\\_37](#). [hal-02431839](#).

- [346] Ahmad ABOUD, Ali JABER, Jean-Pierre CANCES et Vahid MEGHDADI. "CSI map for indoor massive MIMO". In : *2017 Computing Conference*. London, France : IEEE, juillet 2017, p. 1305-1311. DOI : [10.1109/SAI.2017.8252259](https://doi.org/10.1109/SAI.2017.8252259). hal-02388968.
- [347] Mohammed Riyadh ABDMEZIEM et François CHAROY. "Fault-tolerant and Scalable Key Management Protocol for IoT-based Collaborative Groups". In : *SecureComm 2017 : 13th EAI International Conference on Security and Privacy in Communication Networks*. Niagara falls, Canada, octobre 2017, p. 1-20. hal-01588490.
- [348] Sabina AKTAR, Ehtesham ZAHOOR et Olivier PERRIN. "Formal Verification of Authorization Policies for Enterprise Social Networks using PlusCal-2". In : *CollaborateCom 2017 - 13th EAI International Conference on Collaborative Computing : Networking, Applications and Worksharing*. Edimburg, United Kingdom, décembre 2017, p. 1-10. hal-01657116.
- [349] V.V. AVRUTOV, N.I. BOURAOU, L. LAKOZA, O.M. PAVLOVSKYI, Patrick HENAFF, Laurent CIARLETTA et Petro AKSONENKO. "NEMS Gyroscope". In : *ICE ITMC 2017 - 23rd ICE/IEEE International Technology Management Conference*. Porto, Portugal : IEEE, juin 2017, p. 394-398. DOI : [10.1109/ICE.2017.8279912](https://doi.org/10.1109/ICE.2017.8279912). hal-01843148.
- [350] Vadym AVRUTOV, Petro AKSONENKO, Nadiya BOURAOU, Henaff PATRICK et Laurent CIARLETTA. "Expanded Calibration of the MEMS Inertial Sensors". In : *UKRCON 2017 - IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON)*. KIEV, Ukraine, mai 2017. DOI : [10.1109/UKRCON.2017.8100328](https://doi.org/10.1109/UKRCON.2017.8100328). hal-01654275.
- [351] Slim BEN-AMOR, Dorin MAXIM et Liliana CUCU. "Schedulability analysis of dependent probabilistic real-time tasks". In : *MAPSP 2017 - 13th Workshop on Models and Algorithms for Planning and Scheduling Problems*. RTNS '16 Proceedings of the 24th International Conference on Real-Time Networks and Systems. Seeon-Seebruck, Germany : ACM, juin 2017, p. 99-107. hal-01666138.
- [352] Benjamin CAMUS, Fanny DUFOSSE et Anne-Cécile ORGERIE. "A stochastic approach for optimizing green energy consumption in distributed clouds". In : *SMARTGREENS 2017 - International Conference on Smart Cities and Green ICT Systems*. Porto, Portugal, avril 2017. hal-01475431.
- [353] Jérémie CHARLIER, Sofiane LAGRAA, Radu STATE et Jerome FRANCOIS. "Profiling Smart Contracts Interactions with Tensor Decomposition and Graph Mining". In : *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery (ECML-PKDD) - Workshop on MIning DAta for financial applicationS (MIDAS)*. Skopje, Macedonia, septembre 2017. hal-01636450.
- [354] Sofiane LAGRAA et Jerome FRANCOIS. "Knowledge Discovery of Port Scans from Darknet". In : *IFIP/IEEE Symposium on Integrated Network and Service Management (IM) - AnNet workshop*. Lisbonne, Portugal, mai 2017. hal-01636215.
- [355] Hoai LE NGUYEN et Claudia-Lavinia IGNAT. "Parallelism and conflicting changes in Git version control systems". In : *IWCES'17 - The Fifteenth International Workshop on Collaborative Editing Systems*. Portland, Oregon, United States, février 2017. hal-01588482.
- [356] Zhixiang LIU, Laurent CIARLETTA, Chi YUAN, Youmin ZHANG et Didier THEILLIOL. "Path following control of unmanned quadrotor helicopter with obstacle avoidance capability". In : *International Conference on Unmanned Aircraft Systems, ICUAS'17*. Miami, Florida, United States, juin 2017. hal-01537732.

- [357] Dorin MAXIM et Antoine BERTOUT. "Analysis and Simulation Tools for Probabilistic Real-Time Systems". In : *8th International Workshop on Analysis Tools and Methodologies for Embedded and Real-time Systems (WATERS)*. Dubrovnik, Croatia, juin 2017. [hal-01552798](#).
- [358] Dorin I MAXIM, Robert DAVIS, Liliana CUCU-GROSJEAN et Arvind EASWARAN. "Probabilistic Analysis for Mixed Criticality Systems using Fixed Priority Preemptive Scheduling". In : *RTNS 2017 - International Conference on Real-Time Networks and Systems*. Grenoble, France, octobre 2017, p. 10. DOI : [10.1145/3139258.3139276](https://doi.org/10.1145/3139258.3139276). [hal-01614684](#).
- [359] Pierre NEYRON et Lucas NUSSBAUM. "Resources management on the Grid'5000 testbed". In : *GEFI 17 meeting - Global Experimentation for Future Internet*. Rio de Janeiro, Brazil, octobre 2017. [hal-01626320](#).
- [360] Matthieu NICOLAS, VICTORIEN ELVINGER, Gérald OSTER, Claudia-Lavinia IGNAT et François CHAROY. "MUTE : A Peer-to-Peer Web-based Real-time Collaborative Editor". In : *ECSCW 2017 - 15th European Conference on Computer-Supported Cooperative Work*. T. 1. Proceedings of 15th European Conference on Computer-Supported Cooperative Work - Panels, Posters and Demos 3. Sheffield, United Kingdom : EUSSET, août 2017, p. 1-4. DOI : [10.18420/ecscw2017\\_p5](https://doi.org/10.18420/ecscw2017_p5). [hal-01655438](#).
- [361] Lucas NUSSBAUM. "Testbeds Support for Reproducible Research". In : *ACM SIGCOMM 2017 Reproducibility Workshop*. Los Angeles, United States, août 2017. [hal-01577849](#).
- [362] Lucas NUSSBAUM. "Testing Testbeds Towards Reproducibility". In : *GEFI 17 meeting - Global Experimentation for Future Internet*. Rio de Janeiro, Brazil, octobre 2017. [hal-01626303](#).
- [363] Lucas NUSSBAUM. "Towards Trustworthy Testbeds thanks to Throughout Testing". In : *REPPAR - 4th International Workshop on Reproducibility in Parallel Computing (with IPDPS'2017)*. Orlando, United States, juin 2017, p. 9. [hal-01538682](#).
- [364] Loïc ROUCH, Jérôme FRANÇOIS, Frédéric BECK et Abdelkader LAHMADI. "A Universal Controller to Take Over a Z-Wave Network". In : *Black Hat Europe 2017*. London, United Kingdom, décembre 2017, p. 1-9. [hal-01684569](#).
- [365] Weihai YU, Gérald OSTER et Claudia-Lavinia IGNAT. "Handling Disturbance and Awareness of Concurrent Updates in a Collaborative Editor". In : *CDVE 2017 - 14th International Conference on Cooperative Design, Visualization, and Engineering*. Sous la dir. d'Yuhua LUO. T. 10451. LNCS - Lecture Notes in Computer Science. Mallorca, Spain : Springer, septembre 2017. [hal-01652656](#).
- [366] Ehtesham ZAHOOOR, Zubaria ASMA et Olivier PERRIN. "A Formal Approach for the Verification of AWS IAM Access Control Policies". In : *6th European Conference on Service-Oriented and Cloud Computing (ESOCC)*. Sous la dir. de Flavio De PAOLI, Stefan SCHULTE et Einar Broch JOHNSEN. T. LNCS-10465. Service-Oriented and Cloud Computing. Part 3 : Security. Oslo, Norway : Springer International Publishing, septembre 2017, p. 59-74. DOI : [10.1007/978-3-319-67262-5\\_5](https://doi.org/10.1007/978-3-319-67262-5_5). [hal-01677620](#).
- [367] Paul CHAIGNON, Diane ADJAVON, Kahina LAZRI, Jerome FRANCOIS et Olivier FESTOR. "Offloading Security Services to the Cloud Infrastructure". In : *SecSoN 2018 - SIGCOMM Workshop on Security in Softwarized Networks : Prospects and Challenges*. Budapest, Hungary, août 2018. [hal-01939850](#).

- [368] Mirko D'ANGELO, Annalisa NAPOLITANO et Mauro CAPORUSCIO. "CyPhEF : a model-driven engineering framework for self-adaptive cyber-physical systems". In : *Proceedings of the 40th International Conference on Software Engineering : Companion Proceeedings*. 2018, p. 101-104.
- [369] Quang-Vinh DANG et Jérôme FRANÇOIS. "Utilizing attack enumerations to study SDN/NFV vulnerabilities". In : *IEEE ETSN - International Workshop on Emerging Trends in Softwarized Networks*. Montreal, Canada, juin 2018. [hal-01763368](#).
- [370] Abir DEROUICHE, Abdesslem LAYEB et Zineb HABBAS. "Frequent Itemsets Mining with Chemical Reaction Optimization Metaheuristic". In : *PAIS'2018 : The 3rd International Conference on Pattern Analysis and Intelligent Systems*. 2018 3rd International Conference on Pattern Analysis and Intelligent Systems (PAIS). Tebessa, Algeria : IEEE, octobre 2018, p. 1-6. DOI : [10.1109/PAIS.2018.8598483](#). [hal-03251470](#).
- [371] Victorien ELVINGER, Gérald OSTER et François CHAROY. "Prunable Authenticated Log and Authenticable Snapshot in Distributed Collaborative Systems". In : *CIC 2018 - 4th IEEE International Conference on Collaboration and Internet Computing*. 2018 IEEE 4th International Conference on Collaboration and Internet Computing (CIC). Philadelphia, United States, octobre 2018. [hal-01932528](#).
- [372] Thomas GURRIET, Andrew SINGLETARY, Jacob REHER, Laurent CIARLETTA, Eric FERON et Aaron AMES. "Towards a Framework for Realizable Safety Critical Control through Active Set Invariance". In : *ICCPs '18 : ACM/IEEE 9th International Conference on Cyber-Physical Systems*. 2018 ACM/IEEE 9th International Conference on Cyber-Physical Systems (ICCPs). Porto, Portugal : IEEE, avril 2018, p. 98-106. DOI : [10.1109/ICCPs.2018.800018](#). [hal-03254787](#).
- [373] Abir ISMAILI-ALAoui, Khalid BENALI, Karim BAÏNA et Jamal BAÏNA. "Business Process Instances Scheduling with Human Resources Based on Event Priority Determination". In : *BDCA 2018 - Third International Conference on Big Data, Cloud and Applications*. Sous la dir. d'Youness TABII, Mohamed LAZAAR, Mohammed Al ACHHAB et Nourddine ENNEYA. T. 872. Kenitra, Morocco : Springer, avril 2018, p. 118-130. DOI : [10.1007/978-3-319-96292-4\\_10](#). [hal-01889906](#).
- [374] Francis LEPAGE, Théo DOCQUIER, Vincent LECUIRE et Jean-Philippe GEORGES. "TOMAC-WSN : A new WSN efficient protocol for monitoring big distributed mechanical systems". In : *3rd IFAC Conference on Embedded Systems, Computational Intelligence and Tele-matics in Control, CESCIT 2018*. Faro, Portugal, juin 2018. [hal-01886306](#).
- [375] Béatrice LINOT. "Trust in Computer-Supported crisis management information sharing". In : *ECSCW'2018 - 16th European Conference on Computer-Supported Cooperative Work : The International venue on Practice-centred computing and the Design of cooperation technologies*. T. 2. Reports of the European Society for Socially Embedded Technologies 3. Nancy, France, juin 2018. DOI : [10.18420/ecscw2018\\_dc07](#). [halshs-01896410](#).
- [376] Béatrice LINOT, François CHAROY, Jérôme DINET et Valerie SHALIN. "Une perspective computationnelle sur un défi (probable) CRISORSEC". In : *1ère biennale de la sécurité civile : "L'acceptabilité des risques : approches pluridisciplinaires "*. Ecole nationale supérieure des officiers de sapeurs-pompiers. Aix-en-Provence, France, juin 2018. [hal-02280588](#).

- [377] Béatrice LINOT, Jérôme DINET, François CHAROY et Valerie SHALIN. "Information gain in sociotechnical systems". In : *ISCRAM 2018 - 15th International Conference on Information Systems for Crisis Response and Management*. Rochester, United States, mai 2018, p. 764-777. [hal-01823245](#).
- [378] Hoang-Long NGUYEN, Jean-Philippe EISENBARTH, Claudia-Lavinia IGNAT et Olivier PERRIN. "Blockchain-Based Auditing of Transparent Log Servers". In : *The 32nd Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec 2018)*. Proceeding of Data and Applications Security and Privacy XXXII - 32nd Annual IFIP WG 11.3 Conference. Bergamo, Italy, juillet 2018, p. 21-37.
- [379] Hoang-Long NGUYEN, Claudia-Lavinia IGNAT et Olivier PERRIN. "Trusternity : Auditing Transparent Log Server with Blockchain". In : *Companion of the The Web Conference 2018*. Lyon, France, avril 2018, p. 79-80. DOI : [10.1145/3184558.3186938](https://doi.org/10.1145/3184558.3186938).
- [380] Matthieu NICOLAS. "Efficient renaming in CRDTs". In : *Middleware 2018 - 19th ACM/IFIP International Middleware Conference (Doctoral Symposium)*. Rennes, France, décembre 2018. [hal-01932552](#).
- [381] Lucas NUSSBAUM. "Grid'5000". In : *Grid'5000/FIT School*. Sophia-Antipolis, France, avril 2018. [hal-01944478](#).
- [382] Jalal POSSIK, Aicha AMRANI et Grégory ZACHAREWICZ. "Development of a co-simulation system as a decision-aid in Lean tools implementation". In : *2018 Summer Simulation Multi-Conference*. Society for Modeling et Simulation International (SCS). 2018.
- [383] Abdulqawi SAIF, Alexandre MERLIN, Lucas NUSSBAUM et Ye-Qiong SONG. "Monitoring Testbed Experiments with MonEx". In : *Grid5000-FIT Spring School*. SILECS project, INRIA. Sophia Antipolis, France, avril 2018. [hal-01793507](#).
- [384] Benoît SCHNEIDER, Béatrice LINOT et Jérôme DINET. "Les thématiques d'interventions des psychologies praticiens et chercheurs dans le champ de la psychologie des transports et des mobilités". In : *Colloque Psychologie des transports et de la mobilité*. FFPP and 2LPN and EFPA and IFSTTAR. Paris, France, octobre 2018. [hal-02375249](#).
- [385] Nicolas SCHNEPF, Remi BADONNEL, Abdelkader LAHMADI et Stephan MERZ. "Rule-Based Synthesis of Chains of Security Functions for Software-Defined Networks". In : *AVOCS 2018 - 18th International Workshop on Automated Verification of Critical Systems*. Proceedings of the International Workshop on Automated Verification of Critical Systems. Oxford, United Kingdom, juillet 2018. [hal-01892423](#).
- [386] Sylvain CONTASSOT-VIVIER, Jean-François COUCHOT, Mohammed BAKIRI et Pierre-Cyrille HEAM. "Fast and robust PRNGs based on jumps in N-cubes for simulation, but not exclusively for that". In : *International Conference on High Performance Computing & Simulation*. Dublin, Ireland, juillet 2019. [hal-03221902](#).
- [387] Abir ISMAILI-ALAoui, Karim BAÏNA et Khalid BENALI. "Harnessing the power of data and event data for Business Process Improvement". In : *CAISAM 2019 - Complexity Analysis of Industrial Systems and Advanced Modeling*. Ben Guerir, Morocco, avril 2019. [hal-02504017](#).
- [388] Abir ISMAILI-ALAoui, Ouafae KASMI, Amine BAÏNA, Karim BAÏNA, Khalid BENALI et Mostafa BELLAFKIH. "Priority-based Event Management using Fuzzy Logic for an IoT-BPM Architecture". In : *SOCA 2019 - The 12th IEEE International Conference on Service Oriented Computing and Applications*. Kaohsiung, Taiwan, novembre 2019. [hal-02413950](#).

- [389] Béatrice LINOT, Jérôme DINET, François CHAROY et Valerie SHALIN. "Trust in computer-supported crisis management communication : toward a new model". In : *InPACT 2019 - International Psychological Applications Conference and Trends*. Sous la dir. de Clara PRACANA et Michael WANG. Psychological Applications and Trends 2018. World Institute for Advanced Research and Science (W.I.A.R.S.) Porto, Portugal : InScience Press, mai 2019, p. 440-444. [hal-02280866](#).
- [390] Mariama Lobsang NDAO, Siavash ATARODI, Anne PIGNAULT, Seima ARFAOUI et Valérie SAINT-DIZIER DE ALMEIDA. "Le rôle de l'ergonome dans un processus de conception collaboratif : le cas de la conception d'un serious game dédié à la sensibilisation à des métiers de l'agriculture". In : *54ème Congrès international de la Société d'Ergonomie en Langue Française : Comment contribuer à un autre monde ?* Tours, France, septembre 2019. [hal-02281014](#).
- [391] Luke BERTOT, Lucas NUSSBAUM et David MARGERY. "Implementing SFA Support on an Established HPC-flavored Testbed : Lessons Learned". In : *CNERT 2020 - Computer and Networking Experimental Research using Testbeds, in conjunction with IEEE INFOCOM 2020*. Toronto, Canada, juillet 2020, p. 1-6. [hal-02962845](#).
- [392] Pierre-Olivier BRISSAUD, Jérôme FRANÇOIS, Isabelle CHRISMENT, Thibault CHOLEZ et Olivier BETTAN. "Encrypted HTTP/2 Traffic Monitoring : Standing the Test of Time and Space". In : *WIFS2020 - IEEE International Workshop on Information Forensics and Security*. IEEE International Workshop on Information Forensics and Security. New-York/Virtual, United States, décembre 2020. [hal-03032578](#).
- [393] Abdelkader LAHMADI, Alexis DUQUE, Nathan HERAIEF et Julien FRANCQ. "MitM Attack Detection in BLE Networks using Reconstruction and Classification Machine Learning Techniques". In : *MLCS 2020 - 2nd Workshop on Machine Learning for Cybersecurity*. Ghent, Belgium, septembre 2020, p. 1-16. [hal-02948407](#).
- [394] Hoai LE NGUYEN et Claudia-Lavinia IGNAT. "Time-position characterization of conflicts : a case study of collaborative editing". In : *The 26th International Conference on Collaboration Technologies and Social Computing (CollabTech 2020)*. arXiv : 2010.16153. Tartu/VIrtual, Estonia, septembre 2020. [hal-02983533](#).
- [395] Anis Ahmed NACER, Olivier PERRIN et François CHAROY. "Identification of Comparison Key Elements and Their Relationships for Cloud Service Selection". In : *8th European Conference on Service-Oriented and Cloud Computing (ESOCC)*. Sous la dir. d'Antonio BROGI, Wolf ZIMMERMANN et Kyriakos KRITIKOS. T. LNCS-12054. Service-Oriented and Cloud Computing. Heraklion, Crete, Greece : Springer International Publishing, septembre 2020, p. 74-82. DOI : [10.1007/978-3-030-44769-4\\_6](https://doi.org/10.1007/978-3-030-44769-4_6). [hal-02981729](#).
- [396] Matthieu NICOLAS, Gérald OSTER et Olivier PERRIN. "Efficient Renaming in Sequence CRDTs". In : *PaPoC 2020 - 7th Workshop on Principles and Practice of Consistency for Distributed Data*. Heraklion / Virtual, Greece, avril 2020. [hal-02526724](#).
- [397] Karima SMIDA, Hajar TOUNSI, Mounir FRIKHA et Ye-Qiong SONG. "Efficient SDN Controller for Safety Applications in SDN-Based Vehicular Networks : POX, Floodlight, ONOS or OpenDaylight ?" In : *2020 IEEE Eighth International Conference on Communications and Networking (ComNet)*. 2020 IEEE Eighth International Conference on Communications and Networking (ComNet). Hammamet, Tunisia : IEEE, octobre 2020, p. 1-6. DOI : [10.1109/ComNet47917.2020.9306095](https://doi.org/10.1109/ComNet47917.2020.9306095). [hal-03526624](#).

- [398] Frédéric BECK, Abdelkader LAHMADI et Jérôme FRANÇOIS. “HSL : a Cyber Security Research Facility for Sensitive Data Experiments”. In : *DISSECT - 7th IEEE/IFIP Workshop on Security for Emerging Distributed Network Technologies*. Bordeaux, France, mai 2021. [hal-03245054](#).
- [399] Simon DELAMARE et Lucas NUSSBAUM. “Kwollect : Metrics Collection for Experiments at Scale”. In : *CNERT 2021 - Workshop on Computer and Networking Experimental Research using Testbeds*. Workshop in conjunction with IEEE INFOCOM 2021. Virtual, United States, mai 2021, p. 1-6. DOI : [10.1109/INFOCOMWKSHPS51825.2021.9484540](https://doi.org/10.1109/INFOCOMWKSHPS51825.2021.9484540). [hal-03236421](#).
- [400] Philippe GRAFF, Xavier MARCHAL, Thibault CHOLES, Stéphane TUFFIN, Bertrand MATHIEU et Olivier FESTOR. “An Analysis of Cloud Gaming Platforms Behavior under Different Network Constraints”. In : *HiPNet 2021 - 3rd International Workshop on High-Precision, Predictable, and Low-Latency Networking*. Workshops of the 17th International Conference on Network and Service Management (CNSM21). IFIP-IEEE. Izmir (Virtual), Turkey : IEEE, octobre 2021, p. 7. [hal-03421031](#).
- [401] Matthews JOSE, Kahina LAZRI, Jérôme FRANÇOIS et Olivier FESTOR. “Leveraging in-network real-value computation for home network device recognition”. In : *IM 2021 - IFIP/IEEE International Symposium on Integrated Network Management (Demo)*. 2021 IFIP/IEEE International Symposium on Integrated Network Management (IM). Bordeaux / Virtual, France, mai 2021. [hal-03525070](#).
- [402] Mohamed SAID FRIKHA, Sonia METTALI GAMMAR et Abdelkader LAHMADI. “Multi-Attribute Monitoring for Anomaly Detection : a Reinforcement Learning Approach based on Unsupervised Reward”. In : *PEMWN 2021 - 10th IFIP International Conference on Performance Evaluation and Modeling in Wired and Wireless Networks*. Waterloo, Canada, novembre 2021. [hal-03506409](#).
- [403] Runbo SU, Arbia Riahi SFAR, Enrico NATALIZIO, Pascal MOYAL et Ye-Qiong SONG. “PDTM : Phase-based dynamic trust management for Internet of things”. In : *ICCCN 2021 - 30th International Conference on Computer Communications and Networks*. Athens/Virtual, Greece : IEEE, juillet 2021, p. 1-7. DOI : [10.1109/ICCCN52240.2021.9522234](https://doi.org/10.1109/ICCCN52240.2021.9522234). [hal-03322831](#).

## Journaux nationaux

- [404] Vassili RIVRON et Cécile DOLBEAU-BANDIN. “La baguette magique du tout-connecté. Entretien avec Évelyne Broudoux”. In : *Terminal. Technologie de l'information, culture & société*. Us et abus de l'Internet 119 (décembre 2016), [11 p.] DOI : [10.4000/terminal.1552](https://doi.org/10.4000/terminal.1552). [hal-01938635](#).
- [405] Mohamed TLIG, Olivier BUFFET et Olivier SIMONIN. “Intersections intelligentes pour le contrôle de véhicules sans pilote : coordination locale et optimisation globale”. In : *Revue des Sciences et Technologies de l'Information - Série RIA : Revue d'Intelligence Artificielle* 30.3 (2016), p. 353-382. DOI : [10.3166/ria.30.353-382](https://doi.org/10.3166/ria.30.353-382). [hal-01330354](#).

## Conférences nationales

- [406] Abdulqawi SAIF et Lucas NUSSBAUM. "Performance Evaluation of NFS over a Wide-Area Network". In : *COMPAS - Conférence d'informatique en Parallelisme, Architecture et Système*. Lorient, France, juillet 2016. [hal-01327272](#).
- [407] Corentin CLAVIER, Hind BRIL EL HAOUI et WAHIBA RAMDANE CHERIF-KHETTAFF. "Analyse du comportement des métahéuristiques sur un problème de rééquilibrage de lignes d'assemblage". In : *18ème Congrès de la Société Française de Recherche Opérationnelle et d'Aide à la Décision*. Metz, France, février 2017. [hal-02982819](#).
- [408] Simon DELAMARE, Pascal MORILLON et Lucas NUSSBAUM. "Réalisation d'expériences avec Grid'5000". In : *JRES2017 - Journées Réseaux de l'enseignement et de la recherche*. Nantes, France, novembre 2017. [hal-01639524](#).
- [409] Thomas PARIS, Laurent CIARLETTA et Vincent CHEVRIER. "Co-simulation à base d'outils multi-agents : un cas d'étude avec NetLogo". In : *JFSMA 2018 - 26èmes Journées Francophones sur les Systèmes Multi-Agents*. Métabief, France, octobre 2018. [hal-01902786](#).
- [410] Dimitri DELABROYE, Simon DELAMARE, David LOUP et Lucas NUSSBAUM. "Remplacer un routeur par un serveur Linux : retour d'expérience des passerelles d'accès à Grid'5000". In : *JRES - Journées Réseaux de l'Enseignement et de la Recherche*. Dijon, France, décembre 2019. [hal-02401684](#).
- [411] David ESPINEL SARMIENTO, Adrien LEBRE, Lucas NUSSBAUM et Abdelhadi CHARI. "Distributing connectivity management in Cloud-Edge infrastructures : Challenges and approaches". In : *COMPAS 2019 - Conférence d'informatique en Parallelisme, Architecture et Système*. Anglet, France, juin 2019, p. 1-7. [hal-02133606](#).
- [412] Maryline LAURENT, Olivier PAUL, Gregory BLANC, bruno CARRON, Nicolas CHARBONNIER, Isabelle CHRISMENT, Jérôme FRANÇOIS, Damien HOTZ, Philippe JAILLON, Rida KHATOUN, Christophe KIENNERT, Marwan LAZRAG et Souha MASMOUDI. "MOOC Sécurité des réseaux : un apprentissage massif de la sécurité par la théorie et la pratique". In : *RESSI 2019 : Rendez-vous de la Recherche et de l'Enseignement de la Sécurité des Systèmes d'Information*. RESSI 2019 Rendez-vous de la Recherche et de l'Enseignement de la Sécurité des Systèmes d'Information. Erquy, France, mai 2019, p. 1-4. [hal-02437172](#).
- [413] Fangfei LI, Tayeb OULAD KOUIDER, WAHIBA RAMDANE CHERIF-KHETTAFF et Ammar OULAMARA. "Un algorithme génétique pour le problème de tournées de véhicules électriques périodiques". In : *20ème congrès annuel de la société Française de Recherche Opérationnelle et d'Aide à la Décision*. Havre, France, février 2019. [hal-02982816](#).
- [414] Lucas NUSSBAUM. "SILECS/Grid'5000 : le volet data-center de SILECS : Présentation et exemples d'expériences". In : *TILECS - Towards an Infrastructure for Large-Scale Experimental Computer Science*. Grenoble, France, juillet 2019. [hal-02401836](#).
- [415] Maxime SAMSON, Thomas VERGNAUD, Éric DUJARDIN, Laurent CIARLETTA et Ye-Qiong SONG. "Une approche de génération automatique de configuration basée sur les modèles pour les réseaux TSN". In : *#ETR2021 - L'École d'Été Temps Réel 2021*. LIAS-ISAE/ENSMA. Poitiers, France, septembre 2021. [hal-03573608](#).

## Ouvrages

- [416] Alfred TARSKI. *Logic, Semantics, Metamathematics : Papers from 1923-38*. Hackett Publishing Co, 1990.
- [417] Christopher D. MANNING, Prabhakar RAGHAVAN et Hinrich SCHÜTZE. *Introduction to Information Retrieval*. New York, NY, USA : Cambridge University Press, 2008.

## Ouvrages collectifs ou actes de conférence

- [418] Rémi BADONNEL, Robert KOCH, Aiko PRAS, Martin DRAŠAR et Burkhard STILLER. *Management and Security in the Age of Hyperconnectivity : 10th IFIP WG 6.6 International Conference on Autonomous Infrastructure, Management, and Security, AIMS 2016, Munich, Germany, June 20-23, 2016, Proceedings*. T. LNCS-9701. Lecture Notes in Computer Science. Springer International Publishing, 2016. DOI : [10.1007/978-3-319-39814-3](https://doi.org/10.1007/978-3-319-39814-3). hal-01632740.
- [419] Gérôme CANALS, Nadine COUTURE, Laurence NIGAY, Philippe ROOSE et Chantal TACONET, éd. *Actes des 11èmes Journées Francophones Mobilité et Ubiquité*. Lorient, France : dblp computer science bibliography, 2016. hal-01913206.
- [420] James WON-KI HONG, Filip DE TURCK, Joonmyung KANG, Hyunseung CHOO, Rémi BADONNEL, Baek-Young CHOI et Kim MYUNGSUP, éd. *Softwarization of Networks, Clouds, and Internet of Things - Proceedings of the 2nd IEEE International Conference on Network Softwarization (NetSoft 2016)*. Proceedings of the 2nd IEEE International Conference on Network Softwarization (NetSoft 2016). Seoul, South Korea, juin 2016. hal-01399452.
- [421] Rémi BADONNEL, Kazuhiko KINOSHITA, Daphné TUNCER et Sejun SONG. *Special Issue on management of SDN/NFV-based systems*. Wiley, juin 2017. DOI : [10.1002/nem.1982](https://doi.org/10.1002/nem.1982). hal-01630991.
- [422] François CHAROY, Khalil DRIRA, Hongbing WANG, Qi YU, Yan WANG, Yuhong YAN, Jan MENDLING, Mohamed MOHAMED, Zhongjie WANG et Sami BHIRI. *Service-Oriented Computing – ICSOC 2016 Workshops*. Springer, 2017, p. 222. DOI : [10.1007/978-3-319-68136-8](https://doi.org/10.1007/978-3-319-68136-8). hal-01651943.
- [423] Michael S. MACFADDEN, Agustina NG, Claudia-Lavinia IGNAT, Ning GU et Chengzheng SUN, éd. *The Fifteenth International Workshop on Collaborative Editing Systems*. Portland, United States : ACM, 2017. DOI : [10.1145/3022198.3022653](https://doi.org/10.1145/3022198.3022653). hal-01652759.
- [424] Daphné TUNCER, Robert KOCH, Rémi BADONNEL et Burkhard STILLER, éd. *Security of Networks and Services in an All-Connected World - 11th IFIP WG 6.6 International Conference on Autonomous Infrastructure, Management, and Security (IFIP AIMS 2017)*. France, juillet 2017. hal-01630984.
- [425] Daphné TUNCER, Robert KOCH, Rémi BADONNEL et Burkhard STILLER. *Security of Networks and Services in an All-Connected World : 11th IFIP WG 6.6 International Conference on Autonomous Infrastructure, Management, and Security, AIMS 2017, Zurich, Switzerland, July 10-13, 2017, Proceedings*. T. LNCS-10356. Lecture Notes in Computer Science. Springer International Publishing, 2017. DOI : [10.1007/978-3-319-60774-0](https://doi.org/10.1007/978-3-319-60774-0). hal-01806060.

- [426] Claudia-Lavinia IGNAT, Pernille BJØRN et Prasun DEWAN, éd. *Special Issue : ECSCW 2018 : The 16th European Conference on Computer-Supported Cooperative Work, The International Venue on Practice-centred Computing and the Design of Cooperation Technologies*. T. 27. 3-6. Nancy, France : Springer Verlag, décembre 2018, p. 291-1020. [hal-01917238](#).
- [427] Joe BETSER, Carol FUNG, Alexander CLEMM, Jérôme FRANÇOIS, Ata SHINGO, Rémi BADONNEL et Giovane MOURA. *16th IFIP/IEEE International Symposium on Integrated Network Management (IM 2019) - Experience Session*. Sous la dir. d'IEEE. IEEE, avril 2019. [hal-02398024](#).
- [428] Filip DE TURCK, Christian JACQUENET, Prosper CHEMOUIL, Olivier FESTOR, Walter CERRONI et Stefano SECCI, éd. *5th IEEE Conference on Network Softwarization, NetSoft 2019, Paris, France*. Paris, France, juin 2019. [hal-02296176](#).
- [429] Jérôme ERMONT, Ye-Qiong SONG et Christopher GILL, éd. *RTNS '19 : Proceedings of the 27th International Conference on Real-Time Networks and Systems*. RTNS '19 : Proceedings of the 27th International Conference on Real-Time Networks and Systems. INPT - Université de Toulouse. Toulouse, France : ACM Press, novembre 2019. DOI : [10.1145/3356401](https://doi.org/10.1145/3356401). [hal-02972213](#).
- [430] Stefano SECCI, Isabelle CHRISMENT, Marco FIORE, Lionel TABOURIER et Keun-Woo LIM, éd. *TMA 2019 - Proceedings of the 3rd Network Traffic Measurement and Analysis Conference*. Paris, France : IEEE, juin 2019. [hal-02296177](#).
- [431] Nur ZINCIR HEYWOOD et Remi BADONNEL, éd. *Proceedings of the 15th International Conference on Network and Service Management (CNSM 2019)*. Octobre 2019. [hal-02398019](#).
- [432] Remi BADONNEL, Carol FUNG, Sandra SCOTT-HAYWARD, Qi LI, Jie ZHANG et Cristian HESSELMAN. *Guest Editors' Introduction : Special Issue on Latest Developments for Security Management of Networks and Services*. T. 18. 2. IEEE, juin 2021, p. 1120-1124. DOI : [10.1109/TNSM.2021.3079189](https://doi.org/10.1109/TNSM.2021.3079189). [hal-03518395](#).
- [433] Abdelkader LAHMADI, Emmanuel BERTIN et Ruidong LI. *BRAINS 2020 special issue : Blockchain research and applications for innovative networks and services*. Wiley, octobre 2021. DOI : [10.1002/nem.2189](https://doi.org/10.1002/nem.2189). [hal-03409796](#).
- [434] Nur ZINCIR-HEYWOOD et Rémi BADONNEL. *CNSM 2019 special issue : Embracing the new wave of artificial intelligence*. T. 31. 1. Wiley, janvier 2021. DOI : [10.1002/nem.2149](https://doi.org/10.1002/nem.2149). [hal-03518397](#).

## Chapitres de livres

- [435] David E. RUMELHART, Geoffrey E. HINTON et Ronald J. WILLIAMS. "Neurocomputing : Foundations of Research". In : sous la dir. de James A. ANDERSON et Edward ROSENFELD. Cambridge, MA, USA : MIT Press, 1988. Chap. Learning Representations by Back-propagating Errors, p. 696-699. URL : <http://dl.acm.org/citation.cfm?id=65669.104451>.
- [436] Narciso MARTÍ-OLIET et José MESEGUER. "From Petri Nets to Linear Logic". In : *Category Theory and Computer Science*. T. 389. LNCS. Springer, 1989, p. 313-340.

- [437] Charles MØLLER, Carsten J. MAACK et Rune D. TAN. "What is Business Process Management : A Two Stage Literature Review of an Emerging Field". In : *Research and Practical Issues of Enterprise Information Systems II : IFIP TC 8 WG 8.9 International Conference on Research and Practical Issues of Enterprise Information Systems (CONFENIS 2007) October 14–16, 2007, Beijing, China*. Sous la dir. de Li D. XU, A. Min TJOA et Sohail S. CHAUDHRY. Boston, MA : Springer US, 2008, p. 19-31. DOI : [10.1007/978-0-387-75902-9\\_3](https://doi.org/10.1007/978-0-387-75902-9_3). URL : [https://doi.org/10.1007/978-0-387-75902-9\\_3](https://doi.org/10.1007/978-0-387-75902-9_3).
- [438] Jiajie XU, Chengfei LIU et Xiaohui ZHAO. "Resource Allocation vs. Business Process Improvement : How They Impact on Each Other". In : *Business Process Management : 6th International Conference, BPM 2008, Milan, Italy, September 2-4, 2008. Proceedings*. Sous la dir. de Marlon DUMAS, Manfred REICHERT et Ming-Chien SHAN. Berlin, Heidelberg : Springer Berlin Heidelberg, 2008, p. 228-243. DOI : [10.1007/978-3-540-85758-7\\_18](https://doi.org/10.1007/978-3-540-85758-7_18). URL : [https://doi.org/10.1007/978-3-540-85758-7\\_18](https://doi.org/10.1007/978-3-540-85758-7_18).
- [439] Cristina CABANILLAS, José María GARCÍA, Manuel RESINAS, David RUIZ, Jan MENDLING et Antonio RUIZ-CORTÉS. "Priority-Based Human Resource Allocation in Business Processes". In : *Service-Oriented Computing : 11th International Conference, ICSOC 2013, Berlin, Germany, December 2-5, 2013, Proceedings*. Sous la dir. de Samik BASU, Cesare PAUTASSO, Liang ZHANG et Xiang FU. Berlin, Heidelberg : Springer Berlin Heidelberg, 2013, p. 374-388. DOI : [10.1007/978-3-642-45005-1\\_26](https://doi.org/10.1007/978-3-642-45005-1_26). URL : [https://doi.org/10.1007/978-3-642-45005-1\\_26](https://doi.org/10.1007/978-3-642-45005-1_26).
- [440] Fabio CASATI. "Promises and Failures of Research in Dynamic Service Composition". In : *Seminal Contributions to Information Systems Engineering*. Sous la dir. de Janis BUBENKO, John KROGSTIE, Oscar PASTOR, Barbara PERNICI, Colette ROLLAND et Arne SØLVBERG. Springer Berlin Heidelberg, 2013, p. 235-239. DOI : [10.1007/978-3-642-36926-1\\_18](https://doi.org/10.1007/978-3-642-36926-1_18).
- [441] Ons SASSI, Wahiba RAMDANE CHERIF- KHETTAF et Ammar OULAMARA. "Multi-Start Iterated Local Search for the Mixed fleet Vehicle Routing Problem with Heterogeneous Electric Vehicles". In : *Evolutionary Computation in Combinatorial Optimization*. T. 9026. Springer, 2015, p. 138-149. DOI : [10.1007/978-3-319-16468-7\\_12](https://doi.org/10.1007/978-3-319-16468-7_12). hal-01306896.
- [442] Théo COMBE, Wissam MALLOLY, Thibault CHOLEZ, Guillaume DOYEN, Bertrand MATHIEU et Edgardo MONTES DE OCA. "A SDN and NFV use-case : NDN implementation and security monitoring". In : *Guide to Security in SDN and NFV*. Computer Communications and Networks book series (CCN). Springer, novembre 2017. hal-01652639.
- [443] Dorin MAXIM, Liliana CUCU-GROSJEAN et Robert DAVIS. "Probabilistic schedulability analysis". In : *Handbook on Real-Time Computing*. Sous la dir. d'Arvind EASWARAN. Handbook on Real-Time Computing. Springer, 2017. hal-01666110.
- [444] Sven VALLÉE, Ammar OULAMARA et WAHIBA RAMDANE CHERIF-KHETTAF. "Maximizing the Number of Served Requests in an Online Shared Transport System by Solving a Dynamic DARP". In : *Computational Logistics 8th International Conference*. Sous la dir. de Bektaş T., Coniglio S., Martinez-Sykora A. et Voß S. T. 10572. Springer, septembre 2017, p. 64-78. DOI : [10.1007/978-3-319-68496-3\\_5](https://doi.org/10.1007/978-3-319-68496-3_5). hal-02982809.
- [445] NORHANE BENKAHLA, Hajar TOUNSI, Ye-Qiong SONG et Mounir FRIKHA. "Enhanced Dynamic Duty Cycle in LoRaWAN Network". In : *Ad-hoc, Mobile, and Wireless Networks*. T. 11104. Août 2018, p. 147-162. DOI : [10.1007/978-3-030-00247-3\\_15](https://doi.org/10.1007/978-3-030-00247-3_15). hal-02489677.

- [446] Nazim FATEΣ, Vincent CHEVRIER et Olivier BOURÉ. "Is there a trade-off between simplicity and robustness ? Illustration on a lattice-gas model of swarming". In : *Probabilistic Cellular Automata*. Sous la dir. de Pierre-Yves LOUIS et Francesca R. NARDI. Emergence, Complexity and Computation. Springer, 2018. DOI : [10.1007/978-3-319-65558-1\\_16](https://doi.org/10.1007/978-3-319-65558-1_16). hal-01230145.
- [447] Ludomir OTESKI, Guillaume Colin DE VERDIÈRE, Sylvain CONTASSOT-VIVIER, stephane vialle stephane et Juliet RYAN. "Towards a Unified CPU-GPU code hybridization : A GPU Based Optimization Strategy Efficient on Other Modern Architectures". In : *Parallel Computing is Everywhere*. Mars 2018. hal-01742774.
- [448] Hayet CHENTLI, Rachid OUAFI et WAHIBA RAMDANE CHERIF-KHETTAF. "Impact of Iterated Local Search Heuristic Hybridization on Vehicle Routing Problems : Application to the Capacitated Profitable Tour Problem". In : *Communications in Computer and Information Science*. T. 966. In : Parlier G., Liberatore F., Demange M. (eds) Operations Research and Enterprise Systems. ICORES 2018. Springer, mars 2019, p. 80-101. DOI : [10.1007/978-3-030-16035-7\\_5](https://doi.org/10.1007/978-3-030-16035-7_5). hal-02982808.
- [449] Bilal MESSAOUDI et Ammar OULAMARA. "Electric Bus Scheduling and Optimal Charging". In : *International Conference on Computational LogisticsICCL 2019 : Computational Logistics*. Septembre 2019, p. 233-247. DOI : [10.1007/978-3-030-31140-7\\_15](https://doi.org/10.1007/978-3-030-31140-7_15). hal-02981785.
- [450] Bilal MESSAOUDI, Ammar OULAMARA et Nastaran RAHMANI. "Correction to : Multiple Periods Vehicle Routing Problems : A Case Study". In : *European Conference on Evolutionary Computation in Combinatorial Optimization (Part of EvoStar)EvoCOP 2019 : Evolutionary Computation in Combinatorial Optimization*. Mai 2019, p. C1-C1. DOI : [10.1007/978-3-030-16711-0\\_14](https://doi.org/10.1007/978-3-030-16711-0_14). hal-02981094.
- [451] Tayeb OULAD KOUIDER, WAHIBA RAMDANE CHERIF-KHETTAF et Ammar OULAMARA. "Metaheuristics for Periodic Electric Vehicle Routing Problem". In : *Communications in Computer and Information Science book series*. Springer, décembre 2019. DOI : [10.1007/978-3-030-37584-3\\_8](https://doi.org/10.1007/978-3-030-37584-3_8). hal-02982804.
- [452] Tayeb OULAD KOUIDER, WAHIBA RAMDANE CHERIF-KHETTAF et Ammar OULAMARA. "Metaheuristics for the Generalised Periodic Electric Vehicle Routing Problem". In : *Computational Logistics. ICCL 2019*. Sous la dir. de C. PATERNINA-ARBOLEDA et S. VOSS. T. 11756. Lecture Notes in Computer Science book series. Springer, septembre 2019, p. 219-232. DOI : [10.1007/978-3-030-31140-7\\_14](https://doi.org/10.1007/978-3-030-31140-7_14). hal-02982806.
- [453] Nuno M. PREGUIÇA, Carlos BAQUERO et Marc SHAPIRO. "Conflict-Free Replicated Data Types CRDTs". In : *Encyclopedia of Big Data Technologies*. 2019. DOI : [10.1007/978-3-319-63962-8\\_185-1](https://doi.org/10.1007/978-3-319-63962-8_185-1). URL : [https://doi.org/10.1007/978-3-319-63962-8%5C\\_185-1](https://doi.org/10.1007/978-3-319-63962-8%5C_185-1).
- [454] Souhila SADEG, Leila HAMDAD, Mouloud HAOUAS, Kouider ABDERRAHMANE, Karima BENATCHBA et Zineb HABBAS. "Unsupervised Learning Bee Swarm Optimization Metaheuristic". In : *International Work-Conference on Artificial Neural Networks*. T. 11507. Mai 2019, p. 773-784. DOI : [10.1007/978-3-030-20518-8\\_64](https://doi.org/10.1007/978-3-030-20518-8_64). hal-03251454.
- [455] Souhila SADEG, Leila HAMDAD, Amine Riad REMACHE, Mehdi Nedjmeddine KARECH, Karima BENATCHBA et Zineb HABBAS. "QBSO-FS : A Reinforcement Learning Based Bee Swarm Optimization Metaheuristic for Feature Selection". In : *International Work-Conference on Artificial Neural Networks*. T. 11507. Advances in Computational Intelligence. IWANN 2019. Mai 2019, p. 785-796. DOI : [10.1007/978-3-030-20518-8\\_65](https://doi.org/10.1007/978-3-030-20518-8_65). hal-03251457.

- [456] Sven VALLÉE, Ammar OULAMARA et WAHIBA RAMDANE CHERIF-KHETTAF. “Reinsertion Algorithm Based on Destroy and Repair Operators for Dynamic Dial a Ride Problems”. In : *Lecture Notes in Computer Science book series*. T. 11536. Computational Science – ICCS 2019 19th International Conference, Faro, Portugal, June 12–14, 2019, Proceedings, Part I. Springer, juin 2019, p. 81-95. DOI : [10.1007/978-3-030-22734-0\\_7](https://doi.org/10.1007/978-3-030-22734-0_7). hal-02982807.
- [457] Jérôme FRANÇOIS, Frédéric BECK, Ghita MEZZOUR, Kathleen M CARLEY, Abdelkader LAHMADI, Mounir GHOGHO, Abdellah HOUMZ, Hicham HAMMOUCHI, Mehdi ZAKROUM, Narjisse NEJJARI et Othmane CHERQI. “ThreatPredict : From Global Social and Technical Big Data to Cyber Threat Forecast”. In : *Advanced Technologies for Security Applications*. Advanced Technologies for Security Applications. Proceedings of the NATO Science for Peace and Security ’Cluster Workshop on Advanced Technologies. Springer, juin 2020, p. 45-54. DOI : [10.1007/978-94-024-2021-0\\_5](https://doi.org/10.1007/978-94-024-2021-0_5). hal-03036928.
- [458] Louis VIARD, Laurent CIARLETTA et Pierre-Etienne MOREAU. “A Mission Definition, Verification and Validation Architecture”. In : *Formal Methods. FM 2019 International Workshops*. T. 12232. Août 2020, p. 281-287. DOI : [10.1007/978-3-030-54994-7\\_20](https://doi.org/10.1007/978-3-030-54994-7_20). hal-02963914.
- [459] Imene ZAIDI, Ammar OULAMARA, Lhassane IDOUMGHAR et Michel BASSET. “Optimal Online Electric Vehicle Charging Scheduling in Unbalanced Three-Phase Power System”. In : *International Conference on Computational Science and Its ApplicationsICCSA 2020 : Computational Science and Its Applications – ICCSA 2020*. T. 12249. Octobre 2020, p. 90-106. DOI : [10.1007/978-3-030-58799-4\\_7](https://doi.org/10.1007/978-3-030-58799-4_7). hal-03107663.
- [460] Abir DEROUICHE, Abdesslem LAYEB et Zineb HABBAS. “Mining Interesting Association Rules with a Modified Genetic Algorithm”. In : *Mediterranean Conference on Pattern Recognition and Artificial Intelligence*. Mars 2021, p. 274-285. DOI : [10.1007/978-3-03-071804-6\\_20](https://doi.org/10.1007/978-3-03-071804-6_20). hal-03251445.
- [461] Ammar OULAMARA, Imene ZAIDI, Lhassane IDOUMGHAR et Michel BASSET. “Hybrid Heuristic and Metaheuristic for Solving Electric Vehicle Charging Scheduling Problem”. In : *Evolutionary Computation in Combinatorial Optimization*. T. 12692. Lecture Notes in Computer Science. Springer International Publishing, mars 2021, p. 219-235. DOI : [10.1007/978-3-030-72904-2\\_14](https://doi.org/10.1007/978-3-030-72904-2_14). hal-03561746.
- [462] Nicolas SCHNEPF, Remi BADONNEL, Abdelkader LAHMADI et Stephan MERZ. “Automated Orchestration of Security Chains Driven by Process Learning”. In : *Communication Networks and Service Management in the Era of Artificial Intelligence and Machine Learning*. 1. Wiley, octobre 2021. DOI : [10.1002/9781119675525.ch12](https://doi.org/10.1002/9781119675525.ch12). hal-03518390.

## Médiation scientifique

- [413] Fangfei LI, Tayeb OULAD KOUIDER, WAHIBA RAMDANE CHERIF-KHETTAF et Ammar OULAMARA. “Un algorithme génétique pour le problème de tournées de véhicules électriques périodiques”. In : *20ème congrès annuel de la société Française de Recherche Opérationnelle et d’Aide à la Décision*. Havre, France, février 2019. hal-02982816.

## Autres publications

- [463] Xavier MARCHAL, Thibault CHOLEZ et Olivier FESTOR. *PIT matching from unregistered remote Faces : a critical NDN vulnerability*. 3rd ACM Conference on Information-Centric Networking (ACM-ICN'16). Poster. ACM SIGCOMM, septembre 2016. DOI : [10.1145/2984356.2985224](https://doi.org/10.1145/2984356.2985224). hal-01386809.
- [464] Paul CHAINON, Kahina LAZRI, Jerome FRANCOIS et Olivier FESTOR. “Understanding Disruptive Monitoring Capabilities of Programmable Networks”. In : *NetSoft 2017 - IEEE Conference on Network Softwarization- NetFoG Workshop*. Bologna, Italy, juillet 2017. hal-01636117.
- [354] Sofiane LAGRAA et Jerome FRANCOIS. “Knowledge Discovery of Port Scans from Darknet”. In : *IFIP/IEEE Symposium on Integrated Network and Service Management (IM) - AnNet workshop*. Lisbonne, Portugal, mai 2017. hal-01636215.
- [465] Frédéric BECK, Jérôme FRANÇOIS, Thomas LACOUR et Abdelkader LAHMADI. *Verifying Security Requirements of an IoT device using SCUBA Tool Suite*. Contract. Inria Nancy - Grand Est (Villers-lès-Nancy, France) ; In collaboration with Red Alert Labs, novembre 2018. hal-01948512.
- [174] Abdelkader LAHMADI et Frédéric BECK. *Security Analysis of Internet of Things Devices : Hands-on lab*. AIMS 2018 - 12th International Conference on Autonomous Infrastructure, Management and Security. Juin 2018. hal-01943543.
- [458] Louis VIARD, Laurent CIARLETTA et Pierre-Etienne MOREAU. “A Mission Definition, Verification and Validation Architecture”. In : *Formal Methods. FM 2019 International Workshops*. T. 12232. Août 2020, p. 281-287. DOI : [10.1007/978-3-030-54994-7\\_20](https://doi.org/10.1007/978-3-030-54994-7_20). hal-02963914.

## Brevets

- [466] Sylvain CONTASSOT-VIVIER, Virgile DAUGÉ, Laurent CIARLETTA et Adrien GUENARD. “Procédé pour déterminer des positions optimisées d'un objet pour le suivi d'une trajec-toiredans un environnement simulé.” FR2111970 (France). Novembre 2021. hal-03570879.

Report integrators : Laurent Andrey (Team Resist), Philippe Dosch (Department 4), and Sylvain Pogodalla (Team Sémagramme). Report designed under Linux using Emacs, and formated thanks to Lua<sup>AT</sup>EX.