

Curriculum Vitae

Fabien Tarissan

ISP - École Normale Supérieure de Paris-Saclay
61 av. du Président Wilson, 94235 Cachan

Born on 27th of June 1978 in Tarbes (France)

French citizenship

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Actual position

CNRS permanent researcher (CR1)

Member of ISP laboratory (École Normale Supérieure Paris-Saclay, University Paris-Saclay)

Vice-President of scientific mediation for the French Society for Computer Science (SIF)

Topics

- Networks, complex systems, models and simulations
- Graph theory, bipartite graphs, dynamic graphs
- Social sciences, law & computer science

Education

2006 PhD in Computer Science, "Étude d'un formalisme concurrent pour les phénomènes d'auto-organisation et la biologie moléculaire", laboratoire PPS – University Paris Diderot.

Jury : Guy COUSINEAU (president), Vincent DANOS (supervisor), Nadia BUSI (referee), Jean-Louis GIAVITTO (referee), Alessandra CARBONE (referee).

2003 Master degree in Programmation (DEA) : Sémantique, Preuves et Langages, University Paris Diderot

2002 Master degree in Computer Science University Paris Diderot.

2001 Licence degree in Computer Science, University Paris Diderot.

Academic positions

Oct. 2015 CNRS permanent researcher (CR1), member of ISP (University Paris-Saclay).

2009–2015 Associate professor in Computer Science, University Pierre and Marie Curie.

2007–2009 Postdoctoral position at LIX (École Polytechnique) and ISC-PIF (Complex Systems Institute), European project MORPHEX.

2006–2007 Postdoctoral position at the University of Bologna (Italy).

2003–2006 Teaching assistant in Computer Science, University Paris Diderot.

Long term research stays abroad

Invited researcher, European University Institute, Florence (Italie), March 2017.

Invited researcher, University of Copenhagen (Danmark), March 2016.

Postdoctorat, University of Bologna (Italy, 2006–2007).

Honor

Best paper award in the Interdisciplinary Symposium on Complex Systems (ISCS'13), Prague, Czech Republic, 2013.

Best paper award in the Asia-Pacific Network Operations and Management Symposium (AP-NOMS'16), Kanazawa, Japan, 2016.

PUBLICATIONS

International Journals with Reviewing Committee (9)

- [1] **Rigorous Measurement of the Internet Degree Distribution.** Matthieu Latapy, Elie Rotenberg, Christophe Crespelle, Fabien Tarissan, in *Journal of Complex Systems*, Complex Systems Publication, to appear.
- [2] **Analysing the first case of the International Criminal Court from a network-science perspective.** Fabien Tarissan, Raphaëlle Nollez-Goldbach, in *Journal of Complex Networks*, 4(4):616–634, Oxford University Press, 2016.
- [3] **Data-driven traffic and diffusion modeling in peer-to-peer networks : A real case study.** Romain Hollanders, Daniel Bernardes, Bivas Mitra, Jean-Charles Delvenne, Raphael Jungers, Fabien Tarissan, In *Network Science*, 2(3):341–366, Cambridge University Press, 2014.
- [4] **Towards a Bipartite Graph Modeling of the Internet Topology.** Fabien Tarissan, Bruno Quoitin, Pascal Mérindol, Benoit Donnet, Matthieu Latapy, Jean-Jacques Pansiot. In *Computer Networks*, 57(11):2331–2347, Elsevier, 2013.
- [5] **Inadequacy of SIR Model to Reproduce Key Properties of Real-world Spreading Phenomena : Experiments on a Large-scale P2P System.** Daniel Bernardes, Matthieu Latapy, Fabien Tarissan. In *Social Network Analysis and Mining*, 3(4):1195–1208, Springer, 2013.
- [6] **Towards realistic modeling of IP-level routing topology dynamics.** Clémence Magnien, Amélie Medem, Sergey Kirgizov et Fabien Tarissan, In *Networking Science*, 3(1–4):24–33, Springer, 2013.
- [7] **Evaluation of a New Method for Measuring the Internet Degree Distribution : Simulation Results.** Christophe Crespelle, Fabien Tarissan. In *Computer Communication*, 34(5):635–648, Elsevier, 2011.
- [8] **A simple calculus for proteins and cells.** Cosimo Laneve, Fabien Tarissan. In *Theoretical Computer Science*, 404(2):127–141, Elsevier, 2008.
- [9] **Self-assembling Graphs.** Vincent Danos, Fabien Tarissan. In *Natural Computing International Journal*, 6(3):339–358, Springer Verlag, 2006.

International Book Chapter with Reviewing Committee (1)

- [10] **Reformulations in Mathematical Programming : A Computational Approach.** Leo Liberti, Sonia Cafieri, Fabien Tarissan. In *Foundations of Computational Intelligence, Vol. 3*, A. Abraham, A.-E. Hassanien, P. Siarry (eds.), Studies in Computational Intelligence series, 203:153–234, Springer, New York, 2009.

Proceedings of International Conferences with Reviewing Committee (24)

- [11] **Exploiting the Bipartite Structure of Entity Grids for Document Coherence and Retrieval.** Christina Lioma, Fabien Tarissan, Jakob Grue Simonsen, Casper Petersen, Birger Larsen . In *ACM International Conference on the Theory of Information Retrieval (ICTIR)*, Newark, DE, USA, 2016.

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- [12] **Selecting the cases that defined Europe : complementary metrics for a network analysis** . Fabien Tarissan, Yannis Panagis, Urška Šadl , In *IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*, San Francisco, CA, USA, 2016.
 - [13] **Identification of Case Content with Quantitative Network Analysis : an Example from the ECtHR**. Martin Lolle Christensen, Henrik Palmer Olsen, Fabien Tarissan. In *Proceedings of the 29th International Conference on Legal Knowledge and Information Systems (JURIX'16)*, Nice, France, 2016.
 - [14] **P2PTV Multi-channel Peers Analysis**. Marwan Ghanem, Olivier Fourmaux, Fabien Tarissan, Takumi Miyoshi. *The 18th Asia-Pacific Network Operations and Management Symposium (APNOMS'16)*, IEEE, Kanazawa, Japan, 2016. [best paper]
 - [15] **TreeNET : Discovering and Connecting Subnetworks** . Jean-François Grailet, Fabien Tarissan, Benoit Donnet. *IFIP Traffic Monitoring and Analysis workshop (TMA 2016)*, Louvain La Neuve, Belgique, 2016.
 - [16] **Temporal properties of legal decision networks : a case study from the International Criminal Court**. Fabien Tarissan, Raphaëlle Nollez-Goldbach. In *Proceedings of the 28th International Conference on Legal Knowledge and Information Systems (JURIX'15)*, Braga, Portugal, 2015.
 - [17] **Revealing intricate properties of communities in the bipartite structure of online social networks** . Raphaël Tackx, Jean-Loup Guillaume, Fabien Tarissan. In *Proceedings of the IEEE Ninth International Conference on Research Challenges in Information Science (RCIS'15)*, Athènes, Grèce, 2015.
 - [18] **Time Evolution of the Importance of Nodes in dynamic Networks**. Clémence Magnien, Fabien Tarissan. In *International Symposium on Foundations and Applications of Big Data Analytics (FAB'15)*, in conjunction with ASONAM, Paris, France, 2015.
 - [19] **Measuring the Degree Distribution of Routers in the Core Internet**. Matthieu Latapy, Elie Rotenberg, Christophe Crespelle, Fabien Tarissan. In *Proceedings of the IFIP Networking 2014 Conference*, pp. 1–9, Trondheim, Norvège, IEEE, 2014.
 - [20] **Comparing overlapping properties of real bipartite networks**. Fabien Tarissan. In *Proceedings of the Interdisciplinary Symposium on Complex Systems (ISCS'14)*, Emergence, Complexity and Computation, 14:309–318, Springer, 2014.
 - [21] **UDP Ping : a dedicated tool for improving measurements of the Internet topology**. Fabien Tarissan, Elie Rotenberg, Matthieu Latapy, Christophe Crespelle. In *Proceedings of the IEEE 22nd International Symposium on Modeling Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS'14)*, Paris, France, 2014.
 - [22] **On the relevance of the edge-Markovian evolving graph model for real mobile networks**. Aurélie Faure de Pebeyre, Fabien Tarissan et Julien Sopena. In *Proceedings of the IFIP Wireless Days conference (WD'13)*, Valence, Espagne, 2013.
 - [23] **Method of reliability and availability analysis - From the dynamic properties of routing and forwarding paths**. Dimitri Papadimitriou, Davide Careglio, Fabien Tarissan, Piet Demeester. In *Proceedings of the International Workshop on Reliable Networks Design and Modeling (RNDM'13)*, pp. 222–228, 2013. [invited paper]
 - [24] **The network of the International Criminal Court decisions as a complex system**. Fabien Tarissan, Raphaëlle Nollez-Goldbach. In *Proceedings of the Interdisciplinary Symposium on Complex Systems (ISCS'13)*, Emergence, Complexity and Computation, 8:255–264, Springer, 2013. [best paper]
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- [25] **Internet routing paths stability model and relation to forwarding paths.** Dimitri Papadimitriou, Davide Careglio, Fabien Tarissan, Piet Demeester. In *Proceedings of the the 9th International Conference on Design of Reliable Communication Networks (DRCN 2013)*, pp. 20–27, 2013.
- [26] **Relevance of SIR model for real-world spreading phenomena : experiments on a large-scale P2P system.** Daniel Bernardes, Matthieu Latapy, Fabien Tarissan. In *Proceedings of the 2012 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2012)*, pp. 327–334, 2012.
- [27] **Impact of power-law topology on IP-level routing dynamics : simulation results.** Amélie Medem, Clémence Magnien, Fabien Tarissan. In *Proceedings of the Fourth IEEE International Workshop on Network Science for Communication Networks (NetSciCom'12)*, pp. 220–225, 2012.
- [28] **Efficient Measurement of Complex Networks Using Link Queries.** Fabien Tarissan, Matthieu Latapy, Christophe Prieur. In *Proceedings of the First IEEE International Workshop on Network Science For Communication Networks (NetSciCom'09)*, 2009.
- [29] **Inferring Update Sequences in Boolean Gene Regulatory Networks.** Fabien Tarissan, Camilo La Rota. In *Proceedings of the Cologne-Twente Workshop on Graphs and Combinatorial Optimization 2009 (CTW'09)*, 2009.
- [30] **Network reconstruction : a mathematical programming approach.** Fabien Tarissan, Camilo La Rota, Leo Liberti. In *Proceedings of the European Conference on Complex Systems (ECCS'08)*, 2008.
- [31] **Inferring parameters in genetic regulatory networks.** Camilo La Rota, Fabien Tarissan, Leo Liberti. In *Proceedings of the Latin American Conference on Operational Research (CLAIO'08)*, 2008.
- [32] **Self-assembling Trees.** Vincent Danos, Jean Krivine, Fabien Tarissan. In *Proceedings of the Workshop on Structural Operational Semantics (SOS'06), Electronic Notes in Theoretical Computer Science*, 175(1):19–32, Elsevier, 2007.
- [33] **A simple calculus for proteins and cells.** Cosimo Laneve, Fabien Tarissan. In *Proceedings of the Workshop on Membrane Computing and Biologically Inspired Process Calculi (MeCBIC'06), Electronic Notes in Theoretical Computer Science*, 171(2):139–154, Elsevier 2007.
- [34] **Self-assembling Graphs.** Vincent Danos, Fabien Tarissan. In *Proceedings of the International Work-conference on the Interplay between Natural and Artificial Computation (IWINAC 05)*, Lecture Notes in Computer Sciences, 3561:498–507, Springer, 2005.

French Conferences with Reviewing Committee (6)

- [35] **Structures biparties et communautés recouvrantes des graphes de terrains.** Raphaël Tackx, Maximilien Danisch, Fabien Tarissan. In *Acte de la 5ème Journées Modèles et l'Analyse des Réseaux : Approches Mathématiques et Informatique (MARAMI'14)*, 2014.
- [36] **Évaluation du modèle évolutif par arête-markovienne pour reproduire la dynamique des réseaux mobiles.** Aurélie Faure de Pebeyre, Fabien Tarissan, Julien Sopena. In *Acte de la 4ème Journées Modèles et l'Analyse des Réseaux : Approches Mathématiques et Informatique (MARAMI'13)*, 2013.

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- [37] **Un modèle pour les graphes bipartis aléatoires avec redondance.** Émilie Coupechoux, Fabien Tarissan. In *Acte de la 4ème Journées Modèles et l'Analyse des Réseaux : Approches Mathématiques et Informatique (MARAMI'13)*, 2013.
 - [38] **Studying the impact of measurement frequency on the IP-level routing topology dynamics.** Sergey Kirgizov, Clémence Magnien et Fabien Tarissan. In *Proceedings of Grets'i'13*, 2013.
 - [39] **Examining Key Properties of Diffusion Models for Large-Scale Real-World Networks.** Daniel Bernardes, Matthieu Latapy, Fabien Tarissan. In *Proceedings of Algotel'12 (Quatorzièmes Rencontres Francophones sur les aspects Algorithmiques des Télécommunications)*, 2012.
 - [40] **Towards realistic modeling of IP-level routing topology dynamics.** Clémence Magnien, Amélie Medem, Fabien Tarissan. In *Proceedings of Algotel'12 (Quatorzièmes Rencontres Francophones sur les aspects Algorithmiques des Télécommunications)*, 2012.

TALKS

Invited talks

- **Lecture** during the *Academy of European Law Summer School : Law of the European Union*, European University Institute (EUI), Florence, Italie, 2017.
- **Invited speaker** at the *Sixth International Workshop on Social Network Analysis (ARS'17)*, Naples, Italy, 2017.
- **Lecture** at the summer school *École d'été de Lille en Méthodes Quantitatives des Sciences Sociales (Quantilille'16)*, Lille, France, 2016.
- **Invited speaker** at the workshop *Network Analysis of International Law*, Graduate Institute of International and Development Studies, Geneva (Switzerland), 2016.
- **Invited speaker** at the workshop *Réseaux et Histories*, Université Sorbonne Paris Cité, Paris, 2015.
- **Invited speaker** at the workshop *Complexité et politiques publiques*, Université Lyon 3 Jean Moulin, Lyon, France, 2015.
- **Invited speaker** at the colloquium *Mission pour l'interdisciplinarité*, CNRS, Paris, 2015.
- **Invited speaker** at the workshop *Complex Networks & Dynamics*, Le Havre, France, 2014.
- **Invited speaker** at the workshop *Systèmes complexes & Télécoms*, Orange Lab, Paris, 2014.
- **Invited speaker** at the workshop *Dynamics on and of complex networks VI (DOOCN)* co-located with the *European Conference on Complex Systems (ECCS)*, Barcelona, Spain, 2013.
- **Invited speaker** at the workshop *Dynamics on and of complex networks IV (DOOCN)* co-located with the *European Conference on Complex Systems (ECCS)*, Lisbonne, Portugal, 2010.
- **Invited speaker** at the inauguration of the Chair Orange - Paris Descartes, Faculté de Médecine, Université Paris Descartes (France), 2007.
- **Invited speaker** at the workshop ACI VicAnne, Paris, 2006.
- **Lecture** at the summer school *École Interdisciplinaire d'Échange et de Formation en Biologie*, Berder, France, 2005.

Conferences and seminars

- Seminar at *Département d'informatique de l'ENS Rennes*, Rennes, 2016.
- Workshop *Law & Complexity* co-located with the *Conference on Complex Systems (CCS)*, Amsterdam, Netherland, 2016.
- Seminar at the *Information Retrieval Lab*, University of Copenhagen, Danmark, 2016.
- Seminar at the *Danish National Research Foundation's Centre of Excellence for International Courts (iCourt)*, University of Copenhagen, Danmark, 2016.
- Seminar at *Laboratoire Spécification et Vérification (LSV)*, Ens Cachan, Cachan, 2016.
- International Conference *JURIX*, Braga (Portugal), 2015.
- Seminar at *Centre de Mathématiques et de Leur Applications (CMLA)*, Ens Cachan, Cachan, 2015.
- Seminar *Modèle et Algorithme Déterministes*, Laboratoire Jean Kuntzmann (LJK), Grenoble, 2014.
- International Conference *IFIP Wireless Days*, Valencia, Spain, 2013.
- International Conference *Interactions in Complex Systems (ICS)*, Orléans, 2013.
- *Interdisciplinary Symposium on Complex Systems (ISCS)*, Prague, Czech Republic, 2013

- Conference on *Modèles et Analyse des Réseaux : Approches Mathématiques et Informatiques (MARAMI'13)*, Saint-Etienne, 2013
- Workshop *Temporal Networks in Human Dynamics (TNETS)*, Barcelona (Spain), 2013.
- Workshop on *Complexity in social systems : from data to models*, Cergy Pontoise, 2013.
- Seminar of team "Réseaux", Icube, Strasbourg, 2013.
- Seminar "Graphes et structures discrètes", LIP, Lyon, 2013.
- *Cologne-Twente Workshop on Graphs and Combinatorial Optimization (CTW)*, Paris, 2009.
- Seminar at LIFL, Lille, 2009.
- Seminar at IBISC, Evry, 2009.
- Seminar at Bioinformatique team, LRI, Orsay, 2009.
- Seminar at Symbiose team, IRISA, Rennes, 2009.
- *European Conference on Complex Systems (ECCS)*, Jerusalem, Israel, 2008.
- *International Symposium on Networks in Bioinformatics*, Amsterdam, Netherland, 2008.
- Workshop Optimeo, Université Paris-Sud XI, Orsay, 2008.
- Workshop *Automatic Reformulation Search (ARS)*, LIX, Paris, 2008.
- Seminar at Complex Networks team, LIP6, Univ. Paris 6, 2008.
- Workshop *Modélisation, optimisation et analyse statique*, CIRM, France, 2008.
- Arc MOCA, Institut Henri Poincaré, Paris, 2007.
- Seminar at IBISC, Université d'Évry-Val d'Essonne, 2007.
- Seminar at University of Bologna, Italy, 2006 and 2007.
- Workshop *Membrane Computing and Biologically Inspired Process Calculi (MeCBIC)*, Venice, Italy, 2006.
- Workshop *Structural Operational Semantics (SOS)*, Bonn, Germany, 2006.
- International conference *Interplay between Natural and Artificial Computation (IWINAC)*, Canary Islands, Spain, 2005.
- Workshop *Graphes, Réseaux et Modélisation*, ESPCI, Paris, 2003.

Posters

- **Information-theoretic Compression of Weighted Graphs.** Robin Lamarche-Perrin, Lionel Tabourier, and Fabien Tarissan. *Networks : learning, information and complexity*, IHP, Paris, 2016.
- **Real-world Diffusion Phenomena in Complex Networks.** Daniel Bernardes, Matthieu Latapy, Fabien Tarissan. *European Conference on Complex Systems (ECCS)*, Vienne (Autriche), 2011.
- **On the Dynamics of Routing Trees from an Ego-centered point of view.** Amélie Medem, Fabien Tarissan, Clémence Magnien, Matthieu Latapy . *Rescom, École d'été*, La Palmyre (France), 2011.
- **Identification of Qualitative Genetic Regulatory Network Models by a Mathematical Programming Approach.** Camilo La Rota, Fabien Tarissan. *European Conference on Complex Systems (ECCS)*, Warwick (UK), 2009
- **Arabidopsis carpel genetic regulatory network modeling and reconstruction.** Camilo La Rota, F. Monéger, Fabien Tarissan, Leo Liberti, et Michel Morvan. *International Symposium on Networks in Bioinformatics (ISNB)*, Amsterdam (Pays-bas), 2008
- **Self-assembling Trees.** Vincent Danos, Jean Krivine, Fabien Tarissan. *International Conference on Artificial Evolution*, Lille (France), 2005.

RESPONSABILITIES

Project leadership

- Leader of the project *DORÉ : Droit et Réseaux d'interaction Multi-échelle*, CNRS project, PEPS HuMaIn scheme, 2013 and 2014.
- Project Investigator (PI) of UPMC for the European project *Experimental UpdateLess Evolutive Routing (EULER)*, funded by the European Community, scheme Future Internet Research and Experimentation (FIRE/STREP), 2010–2014.
- Leader of the project *DynGo : Étude des algorithmes de dissémination de type gossip sur des topologies aléatoires, réelles et mobiles*, LIP6 project, 2013.
- Leader of the project *Caractérisation de la dynamique des réseaux de contacts*, LIP6 project, 2011.

Member of projects and scientific networks

- Member of the project *Information diversity and Algorithmic Recommendation (Algo-Div)*, French National Agency for Research (ANR), PRC scheme, leader Camille Roth, 2016–2019.
- Member of the international research network *Network of Legal Empirical Scholars (No-LesLaw)*, since 2016
- Member of the research network *Normes, Sciences et Techniques (NOST)*, since 2016.
- Member of the research network *Analyse des Réseaux en SHS (AR-SHS)*, since 2016.
- Member of the research network *Modélisation des interactions temporelles* (MIT thematic pole) of the CNRS Institute for Communication Sciences (ISCC), since 2015.
- Member of the project *Dynamics of Graph Topologies (DynGraph)*, French National Agency for Research (ANR), JCJC scheme, leader Clémence Magnien, 2010–2013.
- Member of the European project MORPHEX, scheme NEST/STREP, leader Michel Morvan, 2007–2009.
- Member of the Complex Systems Society (CSS) since 2010.
- Member of the French National Network of Complex Systems (RNSC) since 2009.
- Member of ARC MOCA, 2006–2007.

Board membership

- Board member of the French Society for Computer Science (SIF), 2016–2019.
- Member of the editorial committee of the French journal ARCS, since 2016.
- Member of the Laboratory Council of LIP6, UPMC, 2014–2015.
- Leader of the Computer Science Colloquium of UPMC, 2013–2015.
- Coordinator of the french Science Festival for the LIP6, UPMC, 2013-2015..
- Deputy member of the Scientific Council of LIP6, UPMC, 2011–2015.

Member of Program Committees

- EUSN : *European Conference on Social Networks* : 2016.

- RCIS : *IEEE Eighth International Conference on Research Challenges in Information Science* : 2014.
- MERMAT : *International Workshop on Measurement-based Experimental Research, Methodology and Tools* : 2013.
- ALGOTEL : Conference *Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications* : 2013, 2014, 2015.
- MARAMI : Conference *Modèles et l'Analyse des Réseaux : Approches Mathématiques et Informatique* : 2010, 2013, 2014, 2015, 2016.
- FGG : Workshop *Fouille de Grands Graphes* : 2013, 2014, 2015.

Scientific events

- Co-organiser of the session entitled *Network Science & Law* co-located with the *European Conference on Social Networks (EUSN'17)*, Mainz, Germany, 2017.
- Co-organiser of the intensive seminar *The Network Approach to (Case) Law*, European University Institute (EUI), Florence, Italie, 2016.
- Leader of the organizing committee of the conference *Modèles et l'Analyse des Réseaux : Approches Mathématiques et Informatique (MARAMI)*, UPMC, Paris, 2014.
- Co-organizer of the workshop on *Dynamics of graphs*, UPMC, Paris, 2012.
- In charge of the team seminar for COMPLEXNETWORKS, LIP6 – UPMC, 2009 – 2011.
- Member of organising committee of the international conference *Graph Theory and Combinatorial Optimization 2009 (CTW09)*, CNAM, Paris, 2009.

Expertise and evaluation

- Member of the scientific council for the *Digital Technology Meetings Awards 2016*, French National Agency for Research (ANR), 2016.
- Member de Ph.D. advisor committees : Thomas Bourgeau (UPMC, 2011), Ruijing Hu (UPMC, 2012), Oana Iova (Univ. Strasbourg, 2013), François Clad (Univ. Strasbourg, 2013), Adel Ait-hamlat (UPMC, 2016), Louis Verny (UPMC, 2016), Catalina Obando (UPMC, 2017).
- Reviewer for the *Joint-Programm Inter Carnot Fraunhofer (PICF)*, French National Research Agency (ANR) and the German Ministry for Research (BMBF), 2011.
- Reviewer for the following international journals : *IEEE/ACM Transactions on Networking (ToN)*, *Computer Networks*, *Theoretical Computer Science (TCS)*, *Complex Networks*, *Computer Communication*, *IEEE Journal on Selected Areas in Communications (JSAC)*, *Discrete Applied Mathematics (DAM)*, *Physica A*, *Information and Computation*, *EPJ Data Science*, *IEEE Transactions on Network and Service Management*, *Computational Systems Biology*, *IEEE Transactions on Computational Systems Biology*.

Promoting Computer Science

- Mentor for computer science projects in elementary school on behalf of *Les Savanturiers* (5th and 6th grade), 2017.
- Organiser of computer science activities in kindergarten, 2017.
- Mentor for the *Class'Code* project, 2016–2017.
- Organiser of the activity *Le fonctionnement de l'Internet*, French Science Festival, 2013.
- Teacher for high school teachers for the Paris Educational District, computer science lectures, 2011-2013.

- Member of the *Informatique et Technologies de l'Information et de la Communication (ITIC)* think tank, promoting the teaching of computer science in high school, since 2010.

SUPERVISION

Post-doctorat

- 2011 AMÉLIE MEDEM.
 Title : *Modélisation de la dynamique de routage à partir de données Radar.*
 Duration : 1 year.

PhD

- 2015 MARWAN GHANEM
 Title : *Caractérisation de la dynamique des réseaux : analyse et modélisation*
 Co-supervision (50%) with Clémence Magnien
- 2014 RAPHAËL TACKX
 Title : *Analyse et modélisation de la structure bipartie des communautés recouvrantes*
 Co-supervision (70%) with Jean-Loup Guillaume
- 2010 DANIEL BERNARDES.
 Title : *Étude des phénomènes de diffusion dans les réseaux à large échelle.*
 Co-supervision (70%) with Matthieu Latapy.
 Defended on 21th March, 2014.

Internship

- 2015 MARWAN GHANEM (M2, UPMC)
 Title : *Analyse de la diffusion multi-canal P2P-TV*
 Duration : 6 months.
- 2015 JEAN-FRANÇOIS GRAILET (M2, Liège, Belgique)
 Title : *Étude de la structure bipartie de la topologie de l'Internet à partir des données d'EXPLORENET.*
 Duration : 3 months.
- 2014 BADREDDINE HAMZA (Avocat, M2 Droit pénal, Université Paris Ouest Nanterre)
 Title : *Le réseau d'interactions multi-échelle de la jurisprudence de la CPI*
 Projet PEPS HuMaIn *Droit et Réseaux d'interaction Multi-échelle*
 Co-supervision with Raphaëlle Nollez-Goldbach
 Duration : 3 months.
- 2014 OLIVIER SCHAUB (M2 Droit pénal, Université Paris 1 – Panthéon Sorbonne)
 Title : *Analyse et modélisation du réseau des décisions de la CPI : l'affaire Lubanga*
 Projet PEPS HuMaIn *Droit et Réseaux d'interaction Multi-échelle*
 Co-supervision with Raphaëlle Nollez-Goldbach
 Duration : 3 months.
- 2014 RAPHAËL TACKX (M2, UPMC)
 Title : *Analyse et modélisation de la structure bipartie des communautés recouvrantes*
 Duration : 6 months.
- 2013 AURÉLIE FAURE DE PEBEYRE (M2, UPMC)
 Title : *Étude des algorithmes de dissémination de type gossip sur topologies aléatoires, réelles et mobiles*
 Projet LIP6 *Étude des algorithmes de dissémination de type gossip sur des topologies aléatoires, réelles et mobiles*
 Co-supervision with Julien Sopena
 Duration : 6 months.

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- 2012 THIBAUT RIEUTORD (M2, ENS Cachan/Bretagne)
Title : *Analyse de la dynamique de réseaux de contacts*
Co-supervision with Clémence Magnien
Duration : 6 months.
- 2011 ANTOINE JAVELOT (M1, École Polytechnique)
Title : *Études et simulations des mesures égo-centrées de la topologie d'internet*
Duration : 3 months.
- 2011 VINCENT COHEN-ADDAD (L3, ENS Lyon)
Title : *Études des mesures égo-centrées de la topologie et caractérisation de la dynamique d'Internet*
Durée 6 weeks.
- 2010 ALEXANDRE ISOARD (L3, ENS Lyon)
Title : Phénomènes de diffusion.
Duration : 6 weeks
- 2010 FRANÇOIS GINDRAUD (L3, ENS Lyon)
Title : Topologie de l'Internet.
Co-supervision with Christophe Crespelle
Duration : 6 weeks
- 2009 SAEMEH HADAVI (M1, Université Pierre et Marie Curie).
Title : *Étude de la topologie de l'Internet à l'aide d'un radar.*
Duration : 3 months

TEACHING

Responsibilities

- 2011–2015** In charge of the first course in CS programs entitled : *Programmation Récursive* (2011–2014) and *Éléments de Programmation 1* (2014–2015).
800 students.
- 2014–2015** In charge of the vocational degree *Flux Numérique* (L3).
- 2014–2015** In charge of the course *Structure et Dynamiques des Réseaux* (M2).
- 2012–2013** In charge of the course *Initiation à la Compilation et aux Machines Virtuelles* (L2).

Lectures (2015–2017)

ENSTA	M2	Operational Research and Big Data	16h
UPMC	M2	Networks : Structures and dynamics	40h
UPMC	L1	Éléments de programmation 1	80h

Université Pierre et Marie Curie : 2009–2015 (Associate Professor)

L1	Programmation récursive	510h (Resp/Lectures)
L1	Éléments de Programmation 1	140h (Resp/Lectures)
L1	Enseignant référent pour étudiants de PCME	12h (Supervision)
L2	Initiation à la compilation et aux machines virtuelles	200h (Resp/Lectures)
L3	Conception d'algorithmes et applications	120h
L3	Réseaux	90h
M1	Logique pour l'informatique avancée	80h
M1	Introduction à la biologie et aux algorithmes sur les arbres et les graphes en bioinformatique	12h
M1	Projet STL (master Science et Technologie du Logiciel)	6h (Supervision)
M1	Projet BIM (master Bio-informatique)	12h (Supervision)
M2	Grands et petits réseaux biologiques : reconstruction et analyse	10h
M2	Grands graphes de terrains	30h
M2	Structures des dynamiques des réseaux	20h (Resp/Lectures)
M2	Network Structure and Dynamics	20h

École Polytechnique : 2007–2009

L3	Algorithmes et Programmation : du séquentiel au distribué	40h
M1	Introduction au C++	16h
M2	Recherche Opérationnelle	16h

Université Paris 7 : 2003–2006 (assistant professor)

L1	Structures de Données	78h
L1	Projet de Programmation	44h
L2	Outils, Systèmes et Réseaux	52h