

# Curriculum vitæ



Work experience Jul 2019 - now

Main responsibilities

**Employer** 

Nov 2018 - Jun 2019

**Employer** 

Sep 2012 - Jan 2019 **Employer** 

Main responsibilities

Oct 2016 - Oct 2018

Jan 2012 - Oct 2016

Oct 2006 - Dec 2011

**Employer** 

Main responsibilities

# Research Lab Director & Chair Professor with MSc, PhD and HDR degrees

Dario ROSSI Name Phone +33.(0)7.77.20.24.33 (work) e-mail dario.rossi@huawei.com Web ☑ https://nonsns.github.io

27/03/1977 Date of Birth Nationality Italian, French Address 75015 Paris, France D Extended academic CV C

DataCom Al4NET CTO and DataCom Department Director, Paris Research Center

Huawei Technologies SASU, 92100 Boulogne-Billancourt, France

DataCom Department Director: leading and managing 6-teams, with experts in: machine learning, performance evaluation, operation research, operating system, network measurement and protocol design.

DataCom Al4NET CTO: lead a multi-site team of Al researchers, defining, planning and executing the Al research strategy for Huawei DataCom business unit, for successful transfer to products.

Publicly accessible achievements:

- Author of 15+ patents, 200+ papers (full list 2) that received several awards and attracted 8500+ citations, for an H-index of 45+ (Google Scholar 2)
- Publications include top-tier machine learning (ICDM, KDD, WWW) and networking (SIGCOMM, CoNEXT, INFOCOM, IMC) conferences and journals (ToN, JSAC, TMM).

Awards:

- ★ Career awards (full list 🗹): IETF Applied Network Research Prize (2016), Google Faculty Research Award (2015), 5×IEEE INFOCOM Distinguished Member (2015-17, 2019, 2023)
- ★ Paper awards (full list 2): IEEE ComSoc Internet TC Award 16, Best paper at NTMS 12, TRAC'14, TRAC'15), SIGCOMM InternetQoE'16, NOSSDAV'18, ITC'20. Runner up at ITC'12, ITC'16, CoNEXT'21 and PAM'24. Best poster TMA'16 and dataset PAM'18.

Distinguished Engineer and Network Al Research Team Leader, Paris Research Center

Huawei Technologies SASU, 92100 Boulogne-Billancourt, France

Professor, Laboratoire d'Informatique de l'X (LIX)

École Polytechnique, 91128 Palaiseau, France

Courses on Peer-to-peer networking and applications (INF570) and Network Security (INF586)

Chair Professor, Computer Science and Networking Department (INFRES)

Full Professor, Computer Science and Networking Department (INFRES)

Associate Professor, Computer Science and Networks Department (INFRES)

Telecom ParisTech, 46 rue Barrault, F-75634 Paris, France

Technical leader and manager of a research team:

- Lead of Cisco's Chair NewNet@Paris, direct reporting to CTO and VP level.
- Principal investigator for several projects ( $2 \times$  FP7,  $3 \times$  Celtic,  $2 \times$  ICT Digital and  $1 \times$  ANR) Advisor of 21 PhDs, 9 PostDoc and several undergraduate students

- Coordinator of IMT RT2 Networking research (70+ researchers from 5 institutions)
  Elected member of the Conseil de Labo (LTCI), member of the LINCS Bureau
  Steering/Program Committees of 70+ international conferences (incl. ACM SIGCOMM, IEEE INFOCOM, ACM CoNEXT) and Editorial/Review board for 15+ journals (full list 🗷)
- Responsible for several courses (RES203, RES212, RES224, RES240) at graduate and undergraduate levels, in French and English

PostDoc Researcher, Electronics Engineering Department (DELEN)

Politecnico di Torino, C.so Duca degli Abruzzi 24, 10129, Torino, Italy

Development of a technique for the identification of Skype traffic, funded by Vodafone Group

Visiting Research Engineer, Electrical Engineering and Computer Science (EECS)

University of California, Berkeley, CA94720-1776, USA

Definition and analysis of high-performance algorithms for Distributed Hash Tables.

Research Engineer, Electronics Engineering Department (DELEN)

Politecnico di Torino, C.so Duca degli Abruzzi 24, 10129, Torino, Italy

PhD studies, revolving around traffic measurement tool http://tstat.tlc.polito.it

Jan 2005 - Sep 2006

**Employer** 

Main responsibilities

Aug 2003 - Aug 2004

**Employer** Main responsibilities

Jan 2001 - Dec 2004 **Employer** 

Main responsibilities

# **Education and qualifications**

2023 **ACM Distinguished Member** 

2022 **IET Member** 

2015 ACM Senior Member

2012 **IEEE Senior Member** 

Feb 2012 Institution

Qualification au Corps des Professeurs des Universités (CNU Qualification for Full Professor)

Conseil Nationale des Universités (CNU), Section 27 Informatique (n.12127228639)

Dec 2010

Habilitation à Diriger des Recherches (HDR in Computer Science)

Institution Université Pierre et Marie Curie (UPMC), 4 place Jussieu 75252, Paris, France

**HDR Thesis Title** P2P Networking: The Dawn of the Homo Interconnexus Era

**Apr 2005** Institution Dottorato in Ing. Elettronica e delle Telecomunicazioni (PhD in Electronics Engineering)

Politecnico di Torino, C.so Duca degli Abruzzi 24, 10129, Torino, Italy

PhD Thesis Title Traffic at the Network Edge: Sniff, Analyze, Act

Mar 2002

Cultore della Materia (University-level Teaching Qualification)

Institution Politecnico di Torino, C.so Duca degli Abruzzi 24, 10129, Torino, Italy

Jan 2001 Esame di Stato, Professione di Ingegnere (Qualifying examination to Engineers Register)

Ministero dell'Istruzione, dell'Universitá e della Ricerca (MIUR), Trastevere 76/a, 00153 Roma, Italy

Nov 2001

Institution

Institution

MSc Thesis Title

Notes

Laurea in Ingegneria delle Telecomunicazioni (MSc in Telecommunication Engineering)

Politecnico di Torino, C.so Duca degli Abruzzi 24, 10129, Torino, Italy

A Simulation Study of Web Traffic over DiffServ Networks

- Thesis developed with NEC Europe Ltd. 36, Kurfürsten-Anlage, Heidelberg, Germany.
- Project Socrates-Erasmus (1999 2000), at Institut Superieur d'Eléctronique du Nord (ISEN)

## Personal skills

Mother tongue(s) Other languages

### Italian

French Living in france since 2006. French Citizenship since 2014

One-year stay in Berkeley, CA (USA) for work purposes. First Certificate in English (FCE), University of Cambridge, UK (1995). Five years of study at the British Churchill Center.

Self-assessment European level(\*)

> French **English**

Understanding				Speaking					Writing
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C2	Proficient user
(*) Common Furancian Framework of Poteronea (CEE) Javal									

Common European Framework of Reference (CEF) level

Social skills

Living in several countries worldwide contributed to both my adaptability to diverse environments and my communication skills; the teaching experience refined the latter. Good propensity to project management and group work, gained throughout leadership in several international projects, and through daily responsabilities as Department and Lab Director.

## Scientific and Computer skills

- Machine learning. Natural language processing, Supervised classification, unsupervised clustering, stream-learning, forecast and regression, rule-based and reinforcement learning.
- **Network science.** Control theory, stochastic modeling, monte-carlo & event-driven simulation.
- Operating Systems. Linux, Unix and TinyOS (power user and development), Windows (user).
- Programming Languages. C/C++, Perl, Python, bash, nesC, Tcl/Tk, Awk, Php, CGI, Ruby Scientific Tools. Octave, Weka, R, Mathematica and CPLEX; ns2, Omnet++ and TOSSIM; Publishing. ETEX, Jekyll, Markdown, graphical (Gimp, Inkscape, Gnuplot, D3.js) and Office.
- Open-source software developed (a selection)
  - Telemetry: an unsupervised stream-learning clustering algorithm for anomaly detection ccnSim: ccnSim is a scalable Information centric network simulator with 4000+ download WebQoE: our award-winning project on inferring Web users Quality of Experience iGreedy: our award-winning project on IPv4 anycast detection and geolocation
  - ccnSim: ccnSim is a scalable Information centric network simulator with 4000+ downloads

  - iGreedy: our award-winning project on IPv4 anycast detection and geolocation
  - Tstat: Traffic analyzer tool with traffic classification capabilities, 30000+ downloads.

Sports and Interests

Ski, hiking, reading, watching OV movies, photography (handheld HDR, with CHDK, and before it was a commodity) and playing guitar (well, 2+ decades ago, when I had no kids and some spare time)

Driving licences

Italian (Italy, 1996), California (CA, USA, 2003) and French (2016) Driving Licenses

# **Academic CV**

# Extensive academic-style details concerning professional activities

# **Awards**

Academic awards

Note: I am not listing internal Huawei awards. While I am proud of the distinctions I have received, company awards are not publicly accessible and so hard to verify with respect to academic awards.

- ★ Runner-up for Best paper award at Passive and Active Measurement (PAM) (2024)
- ★ Inducted ACM Distinguished Member for multi-disciplinary approaches and pioneering adoption of machine learning in networking research (2023)
- ★ Distinguished Member of the IEEE INFOCOM TPC (2023)
- ★ Runner up for Best paper award at ACM CoNEXT (2021)
- ★ Receipient of the Best paper award at ITC32 (2020)
- ★ Proud that Danilo Cicalese won the 2nd prize of Telecom ParisTech thesis awards (2019)
- ★ Distinguished Member of the IEEE INFOCOM TPC (2019)
- ₩ Winner of the Best paper award at NOSSDAV'18, the 28th ACM SIGMM Workshop on Network and Operating Systems Support for Digital Audio and Video (2018)
- ★ Winner of the Best dataset award at the Passive and Active Measurement (PAM) conference (2018)
- ★ Proud receipient of the IEEE ComsSoc/ISOC Internet Technical Committee Best Paper Award (2016-2017)
- ★ Distinguished Member of the IEEE INFOCOM TPC (2017)
- ★ Proud that Enrico Bocchi, co advised with Marco Mellia from Politecnico di Torino, has received the GTTI PhD thesis award (2017)
- ★ Our work was selected as the Best paper of the ACM SIGCOMM Internet-QoE workshop (2016) and reprinted in ACM SIGCOMM Comput. Commun. Rev..
- ★ IETF Applied Network Research Prize (2016)
- ★ Best poster award at IFIP TMA (2016)
- ★ Distinguished Member of the IEEE INFOCOM TPC (2016)
- ★ Danilo's HIJACK-2 team won the CAIDA BGP hackaton (2016)
- ★ Google Faculty Research Award (2015)
- ★ ACM Senior member (2015)
- ★ Best paper award at the 6th International Workshop on TRaffic Analysis and Characterization (TRAC 2015)
- ★ Distinguished Member of the IEEE INFOCOM TPC (2015)
- ★ The research stage of Francois Espinent (X2011) at LINCS was awarded honourable distinction with unanimous congratulations from the jury
- ★ Best paper award at the 5th International Workshop on TRaffic Analysis and Characterization (TRAC 2014)
- ★ Runner up for best paper award at the 25th International Teletraffic Congress (ITC 2013)
- ★ IEEE Senior member (2013)
- ★ Best paper award at the 5th IFIP International Conference on New Technologies, Mobility and Security (NTMS 2012)

# **Teaching activities**

Responsible

- INF568 Network security
  - École Polytechnique, 50h, French 2017-2018
- RES212 Network security
- Telecom ParisTech, 20h, French 2017-2018
- RES203 Internet applications
  - Telecom ParisTech, 20h, French 2015-2019
- INF570 Peer-to-Peer Networks
  - École Polytechnique, 50h, French 2012-2017
- RES224 Architecture des applications Internet Telecom ParisTech, 30h, French - 2008-2015
- RES223 Le transport et routage Internet Telecom Paris Tech, 30h, French - 2008-2012
- RES240 Principe et architecture des r\(\tilde{A}\)fseaux IP
   Telecom ParisTech, 60h, French 2007-2011
- MSMNT Master Management des Nouvelles Technologies HEC, 15h, French - 2008-2010

#### **Participant**

- RES101 Introduction aux réseaux de telecommunications Telecom ParisTech, 6h - 2015
- GTM2 Groupe de travail Master M2 Recherche
- Université Pierre et Marie Curie LIP6, 3h, French 2010, 2011 RES380 Expérimentation et etude de performance de technologies réseaux
- Telecom ParisTech, 6h, English 2007
- Wireless Sensor Networks seminar, Master in Wireless Systems and Related Technologies Politecnico di Torino, 20h, English - 2005, 2006
- Wireless Sensor Network Professional training course TEACH srl (V.S. Gregorio 34, Milan, Italy), 30h, Italian - 2005
- O6EJRBQ Introduzione alle reti telematiche Politecnico di Torino, 20h, Italian - 2002 01EJVEB Laboratorio di Protocolli
- Politecnico di Torino, 50h, Italian 2002
- 01FOCEB Complementi di Laboratorio Politecnico di Torino, 10h, Italian) - 2002
- ECDL European Computer Driving Licence Ludwigh Informatica s.a.s. (V. Cernaia 31, 10100, Torino, Italy), 60h, Italian - 2001

# Supervision

#### Subordinates

Note: detailed information about subordinates in Huawei cannot be shared due to obvious business concerns, for which the terse description on the main part of this CV is considered sufficient

PhD collaborations (ongoing) Note: I am no longer directly supervising PhDs, that I prefer to let closely follow by collaborators in Huawei and Academia, but I am still happily following their work at a technical level

- A. Nascita (visiting, 2024), co-advised by A. Pescape, Universita di Napoli Federico II and J. Krolikowski, Huawei
- A. Monterubbiano (visiting, 2023), co-advised by S. Pontarelli, Universita di Roma la Sapienza and M. Gallo, Huawei
- I. Guarini (visiting, 2022), co-advised by A. Pescape, Universita di Napoli Federico II and A. Finamore, Huawei
- W. Chao (CIFRE, started 2022), co-advised by P. Michiardi, EURECOM and A. Finamore,
- M. Boffa (started 2021), co-advised by M. Mellia, Politecnico di Torino and Z. B. Houidi, Huawei
   R. Vieira (started 2020), co-advised by M. Mellia, Politecnico di Torino and Z. B. Houidi, Huawei
- R. Azorin (CIFRE, started 2020), co-advised by P. Michiardi, EURECOM and M. Gallo, Huawei
- G. Sviridov (visiting, 2019), co-advised by P. Giaccone and A. Bianco, Politecnico di Torino

Note: Following the list of PhD I have been advising over the years at Telecom ParisTech, including visiting PhDs

- A. Putina (graduated Feb 2022), co-advised with M. Sozio, Telecom ParisTech
- F. Salutari (graduated Nov 2021), co-advised with M. Sozio, Telecom ParisTech
- T. Green (graduated 2021), co-advised with L. lannone and A. Lambert, Orange
   M. Enguehard (graduated May 2019), co-advised with R. Droms, Cisco
- J. Samain (graduated Mar 2019), co-advised with G. Carofiglio, Cisco
- D. Cicalese (graduated May 2018), co-advised with T. Friedman, UPMC T. Zhang (visiting 2017), co-advised with Paolo Giaccone, Politecnico di Torino
- E. Bocchi (graduated Apr 2017), co-advised with M. Mellia, Politecnico di Torino
   C. Imbrenda (graduated Nov 2016), co-advised with L. Muscariello, Orange
- A. Araldo (graduated Oct 2016), co-advised with F. Martignon, LRI
   Y. Gong (graduated Mar 2016)
- R. Mansilha (visiting 2015), co advised with M. Barcelo, Universidad federal do Rio Grande do
- M. Tortelli (visiting 2014), co-advised with G. Boggia, Politecnico di Bari
- G. Rossini (graduated Feb 2014)
- C. Testa (graduated Nov 2012)
- M. Gallo (graduated Nov 2012), co-advised with L. Muscariello, Orange
- P. M. Santiago del Rio (visiting 2012), co-advised with J. Aracil, Universidad Autonoma Madrid
- R. Vilardi (visiting 2012), co-advised with G. Boggia, Politecnico di Bari
- P. Veglia (graduated Sep 2011)
- S. Valenti (graduated Sep 2011)
- P. Bermolen (graduated Feb 2010), co-advised with F. Baccelli, INRIA

PhD Advisor (graduated)

#### Visiting Research Fellows

- M. Crovella (Visiting Professor from Boston University, 2018) https://www.cs.bu.edu/ faculty/crovella/
- R. Rejaje (Visiting Professor from University of Oregon, 2018) https://ix.cs.uoregon. edu/~reza/
- S. Pontarelli (Visiting Researcher from University of Rome Tor Vergata, 2017)
   L. De Cicco (Visiting Researcher from Politecnico di Bari, 2013-2014)
- J. Alcober (Visiting Researcher from Universitat Politecnica de Catalunya, 2008)

#### **PostDocs**

- T. Zhang (PostDoc, 2018-2019)
- D. Da Hora (PostDoc, 2017-2018)
- L. Linguaglossa (PostDoc, 2017-2019)
- M. Tortelli (PostDoc, 2015-2017)
- J. Auge (PostDoc, 2014-2015)
- D. Zeaiter Joumblatt (PostDoc, 2013-2015)

#### Engineers, MSc and BSc Interns

Note: Starting from 2020, I am no longer directly supervising MSc and BSc interns, but I am still happily following their work at a technical level

- 2021: M. Boffa, S. Nesic, W. Chao, D. M.Fernandez
- 2019: F. Spinelli2018: V. Bruschi
- 2017: V. A. Krishna, A. Putina, F. Salutari
- 2016: G. Milotta, J. Ficapal, V. Martino,
- 2014: S. Giuffrida
- 2014: L. Bordone, D. Cicalese, V. Di Gennaro (★ Best paper award), F. Espinet (★ Awarded "Prix de stage" at Ecole Polytechnique)
- 2013: S. Colabrese G. Nassopulos, S. D'Ambrosio, P. Casoria, P. Gu, A. Araldo (★ Best paper
- 2012: W. Bellante, M. Spina, R. Chiocchetti, C. Chirichella
- 2010: D. Tammaro, A. Raju Kishore, E. Alessandria, G. Rossini
- 2009: M. Sammarco , G. LaMantia, E. Sottile, A. Ktari
- 2008: A. Finamore
- 2007: M. Arujo Cardenas, D. Bonfiglio, N. Ritacca2006: S. Ricci

#### **Juries**

#### **HDR Jury**

- Fabien Geyer, TU Munich (2021)
- Yassine Hadjadj-Aoul, University of Rennes 1 (2020)
- Gwendal Simon, Telecom Bretagne (2015)
- Thomas Alfroy (Examiner, 2024)
  - Thomas Alfroy (mi-parcours, 2023)
     Tom Barbette (Examiner, 2018)
     Luca Vassio (President, 2018)

  - Zied Aouini (Reviewer, 2017)
  - Nassima Bouzakaria (Examíner, 2017)
  - Jonatan Krolikowski (mi-parcours, 2017)
  - Walid Benchaita (President, 2016)
     Leonce Mekinda (President, 2016)

  - Leonardo Linguaglossa (Examiner, 2016)
  - Cesar Bernardini (Reviewer, 2015)
  - Muhammad Faheem (Examiner, 2014)
  - Ghida Ibrahim (President, 2014)
  - Nathalia Rozhanova (mi-parcours, 2014)
  - Tristan Groleat (2014)
  - Nan Zhao (Examiner, 2014)
  - Yasir Khan (mi-parcours, 2013)
  - Stephane Wustner (mi-parcours, 2013) - Nan Zhao (mi-parcours, 2013)
  - Ahlem Reggani (mi-parcours, 2013)
  - Nada Sbihi (mi-parcours, 2012)
  - Ghida Ibrahim (mi-parcours, 2012)
  - Felipe Mata Marcos (Reviewer, 2012)
  - Alexandre Lung Yut Fong (Examiner, 2011)
    Diego Alberto (Examiner, 2010)

  - Noureddine Boujnah (Examiner, 2010)
  - Mauricio Andres Cacères Duran (Examiner, 2010)
  - Valentina Martina (Examiner, 2010)
  - Francesco Mininni (Examiner, 2009)

Michele Petracca (Examiner, 2009)

- Robert Birke (Examiner, 2009)
- Davide Cuda (Examiner, 2009)

# **Editorial responsabilities**

Journal Editorial Boards

- IEEE Transactions on Networks and Service Management (Associate Editor, ongoing)
- IEEE Transactions on Green Communications and Networking (Associate Editor, until 2019)
   IEEE Journal on Selected Areas in Communications (Associate Editor, Green Communications and Networking Series, until 2019)
- Elsevier Computer Networks Journal (Associate Editor, until 2019)

Journal Reviewer

Note: this is mostly an historical record of journal reviewing activities.

- IEEE SpectrumIEEE Networks
- IEEE Communication Magazine
- IEEE Transactions on Networking
- IEEE Transactions on Parallel and Distributed Systems
   IEEE Transactions on Mobile Computing
- IEEE Transactions on Network and Service Management
- IEEE Transactions on Circuits and Systems for Video Technology
- Elsevier Computer Networks Journal
   Elsevier Computer Communications
- Springer Peer-to-Peer Networking and Applications
- Springer Annals of Telecommunications
- Wiley Security and Communication Networks

# Community service

Scientific seminar

I like regular seminars, they are food for the brain.

- When I joined Telecom Paris, I created the seminar of the INFRES department in 2008 and run it for 10 years, hosting over 300+ talks (see the full list)
- When I moved to Huawei, I again created a weekly seminar but immediately delegated the organization to Antoine Fressencourt, who's been handling all logistic aspects: the seminar is not openly accessible but we welcome external speakers.

Steering, Chairing and Advisory **Boards** 

- General Chair of Huawei Global Connect, October 2024, Paris, France
   General Co-Chair of ACM CONEXT'23, December 2023, Paris, France

- General Chair of Huawei Global Connect, December 2023, Paris, France
   Member of the Advistory Board **DET department** of Politecnico di Torino, 2022-ongoing
- Chair of ITC34 Panel on Al Native networking, September 2022, Shenzhen, China

- General Chair of Huawei Global Connect, November 2022, Paris, France
   General Chair of Huawei Global Connect, November 2021 (virtual)
   General Chair of Huawei Global Connect, November 2020 (virtual)
   Workshop Co-Chair of ACM CONEXT'20, December 2020, Barcellona, Spain.
- Best Paper Committee of PAM'20 Passive and Active Measurement, March 2020, Oregon, US
- Award Committee of ITC30 star award, 2018–2020
- Program Chair of Huawei Global Connect, April 2019, Versailles, France
- Vice Chairman of the International Teletraffic Conference Steering committee, 2014–2022
   Steering committee of ACM SIGCOMM AINTEC, 2015-2019
- Co-Chair of TMA PhD School'18 IFIP Traffic Measurement and Analysis Conference, June 2018, Vienna, Austria,
- Sponsorship Chair of IFIP TMA'18 IFIP Traffic Measurement and Analysis Conference, June 2018, Vienna, Austria,
- Area Chair of ITC29, 29th ITC conference, Area #4 (Measurements and Big Data Analytics), Genoa, Italy, September 2017,
- PC Chair of ACM SIGCOMM ICN 2016, 3rd ACM Conference on Information-Centric Networking (ICN 2016), 26-28 September 2016
- PC Chair of AINTEC 2014, 10th Asian Internet Engineering Conference (AINTEC), Thailand, November, 2014 held in cooperation with ACM SIGCOMM
- General Chair of ACM SIGCOMM PhD School on TMA 2014 4th PhD School on Traffic Monitoring and Analysis, London, UK, 14-16 April 2014
- PC Chair of AINTEC 2013 9th Asian Internet Engineering Conference (AINTEC)

**Technical Program Committees** 2025

- ICDCS'25, 45th IEEE International Conference on Distributed Computing Systems, July 2025, Glasgow, Scotland, UK, jul, 2025
- AAAI'24, 39th AAAI Conference on Artificial Intelligence (AAAI-24), February 2025, Philadelphia, PA

- GNNet'24, the 3rd Graph Neural Networking Workshop, co-located with ACM CoNEXT 2024, 2024 December, Los Angeles, US ICNP'24, 32nd IEEE International Conference on Network Protocols (ICNP 2024), October 2024, Charleroi, Belgium ICDCS'24, 44th IEEE International Conference on Distributed Computing Systems, July 2024, Jersey City, New Jersey, USA. **AAAI** 24, 38th AAAI Conference on Artificial Intelligence (AAAI-24), February 2024, Vancouver, British Columbia — AAAI'23, 37th AAAI Conference on Artificial Intelligence, Feb 2023 2023 IEEE INFOCOM'23, 38th IEEE International Conference on Computer Communications, May 2022, Virtual. Distinguished member award \* ACM GNNET'22, Graph Neural Networking Workshop, Co-located with ACM CoNEXT 2022, 2022 Dec 2022âAN, Rome, Italy IEEE INFOCOM'22, 38th IEEE International Conference on Computer Communications, May 2022, Virtual — ITC34, International Teletraffic Congress, September 2022, Shenzhen, China NetSys 2021, Conference on Networked Systems, Machine Learning in Networking workshop, 2021 March 2021, LÄijbeck, Germany IEEE INFOCOM'21, 38th IEEE International Conference on Computer Communications, April 2021, Virtual IEEE INFOCOM'20, 37th IEEE International Conference on Computer Communications, April 2020 2020, Beijing China (postponed and online only) ITC'32, International Teletraffic Congress, September 2020, Osaka, Japan — PAM'20 Passive and Active Measurement (PAM) conference, March 2020, Oregon, US IEEE INFOCOM'19, 37th IEEE International Conference on Computer Communications, April 2019 2019, Paris, France WWW Wiki workshop'19, 30th Web Conference (WWW), May 2019, San Francisco, CA ITC31, International Teletraffic Congress, August 2019, Budapest, Hungary ACM SIGCOMM'18, 32st ACM SIGCOMM Conference, Poster and demo track, August 2018, 2018 Budapest, Hungary — IEEE INFOCOM'18, 36th IEEE International Conference on Computer Communications, April 2018, Hawaii, US — ITC30, ITC30 Area 2: Network Measurements and Big Data, September 3-7, 2018, Vienna, - FMEC2018, Third International IEEE Conference on Fog and Mobile Edge Computing (FMEC'18), April 23-26, 2018, Barcelona, Spain. 2017 and Technologies (CoNEXT'17),
  - ACM CoNEXT'17, 13th ACM International Conference on emerging Networking EXperiments
    - ACM ICN'17, 4th ACM Conference on Information-Centric Networking (ICN'17), Sep. 26-28, Poster and demo session.
    - ITC29, 29th ITC conference, Area #1 (Networking, Cloud/Fog/Ubiquitous Computing, and Applications, Genoa, Italy, September 2017
    - BigDAMA'17, 1st ACM SIGCOMM 2017 Workshop on Big Data Analytics and Machine Learning for Data Communication Networks (Big-DAMA'17)
    - ACM SIGCOMM'17, 31st ACM SIGCOMM Conference, Poster and demo track, Los Angeles, CA, USA, August 2017
    - IFIP TMA'17, IFIP Network Traffic Measurement and Analysis Conference, Dublin, Ireland, June 2017
    - IEEE INFOCOM'17, 35th IEEE International Conference on Computer Communications Atlanta, USA, May 2017 Distinguished Member Award ★
    - CCDWN, 2nd workshop on Content Delivery and Caching in Wireless Networks (CCDWN'17), co-located with WiOpt 2017, Paris France, May 2017
    - **IEEE INFOCOM'16** 34th IEEE International Conference on Computer Communications, Hong Kong, China, 26 April - 1 May, 2015. Distinguished Member Award ★
    - ITC28 The 28th International Teletraffic Congress (ITC28), Wuezburg, Germany September 12-16, 2013, held in cooperation with ACM SIGCOMM
    - IEEE INFOCOM'15 34th IEEE International Conference on Computer Communications, Hong Kong, China, 26 April - 1 May, 2015. Distinguished Member Award ★
    - ACM SIGCOMM ICN'15 2nd ACM conference on Information-centric Networking, San Francisco, USA, September 30 - October 2, 2015.
    - ICNC'15, International Conference on Computing, Networking and Communications, Anaheim, CA. USA. February 16-19, 2015
    - PAM'15 Passive and Active Measurement Conference, New York City, NY, March 19-20, 2015

2016

2015

2014

2013

- IEEE INFOCOM'14 33rd IEEE International Conference on Computer Communications, Toronto, Candada, April 27-May 2, 2014
- TMA 2014 6th International Workshop on Traffic Monitoring and Analysis (TMA), London, UK,
- TRAC 2014 5th International Workshop on TRaffic Analysis and Characterization, Nicosia, Cyprus, August 4-8, 2014
- EuCNC 2014 23rd European Conference on Networks and Communications, Bologna, Italy, June 23-26, 2014.
- IEEE Globecom'14 IEEE Global Communication Conference, Austin, Texas, US, 9-12 December. 2014
- IEEE CCNC'14 11th Annual IEEE Consumer Communication and Networking Conference (CCNC 2014), Las Vegas, January, 2014
- IEEE ICNC'14 International Conference on Computing, Networking and Communications (ICNC 2014), Honolulu, Hawaii, USA, February 3-6, 2014
- ACM CoNEXT 2013 9th International Conference on emerging Networking Experiments and Technologies (CoNEXT), Santa Barbara, CA, USA, 9-12 December 2013
- ITC25 The 25th International Teletraffic Congress (ITC25), Shanghai, China, September 10-12, 2013
- IEEE TRICANS'13 1st IEEE ICC Workshop on Traffic Identification and Classification for Advanced Network Services and Scenarios (TRICANS), Budapest, June 2013
- IEEE ISWCS'13 Workshop on Energy Efficient Wireless Networks co-located with the 10th International Symposium on Wireless Communication Systems, Ilmenau, Germany, 27-30 August
- IEEE ISCC 2013 18th IEEE Symposium on Computers and Communications, Split, Croatia, July 7-10, 2013
- IEEE ICC'13 IEEE International Conference on Communications, Budapest, 9-13 June 2013
- IEEE INFOCOM'13 The 31th IEEE International Conference on Computer Communications, Turin, Italy, 13-19 April 2012
- IEEE INFOCOM Workshop on Emerging Design Choices in Name-Oriented Networking (NOMEN'13) co-located with the 31th IEEE International Conference on Computer Communications, Turin, Italy, 13-19 April 2012
- IEEE INFOCOM Workshop on Traffic Measurement and Analysis (TMA'13) co-located with the 31th IEEE International Conference on Computer Communications, Turin, Italy, 13-19 April 2012
- ACM SAC'13 28th ACM Symposium on Applied Computing, Coimbra, Portugal, March 18-22, 2013
- IEEE CCNC'13 10th Annual Annual IEEE Consumer Communications and Networking Conference, Las Vegas, January, 2013

### 2012

# — AINTEC 2012

8th Asian Internet Engineering Conference (AINTEC) 2012, November 14-16, in Bangkok, Thailand.

### — IEEE CAMAD 2012

IEEE International Workshop on Computer-Aided Modeling Analysis and Design of Communication Links and Networks (CAMAD), Barcelona, Spain, 17-19 September 2012

- IEEE ISCC 2012 17th IEEE International Symposium on Computer and Communications, Cappadocia, Turkey, July 1-4, 2012
- IEEE GCN 2012 IEEE ICC'12 Workshop on Green Communications and Networking, Ottawa, Canada, June 10-15 2012
- IEEE ICC 2012 IEEE International Conference on Communications, Ottawa, Canada, June 10-15 2012
- IEEE WCNC 2012 Workshop on Future Green Communications IEEE Wireless Communications and Networking Conference (WCNC 2012), Workshop on Future Green Communications, Paris, France 1 April 2012
- ACM SAC 2012 The 27th Annual ACM Symposium on Applied Computing, Networking Track, March 25-29, 2012, Riva del Garda (Trento), Italy.
- IEEE INFOCOM 2012 The 30th IEEE International Conference on Computer Communications, Orlando, FL, 20-25 March 2012
- IEEE INFOCOM Workshop on Emerging Design Choices in Name-Oriented Networking (NOMEN'2012) Co-located with the 30th IEEE International Conference on Computer Communications. Orlando. FL. 20-25 March 2012
- IEEE INFOCOM Workshop on Communications and Control for Sustainable Energy Systems (CCSES): Green Networking and Smart Grids Co-located with the 30th IEEE International Conference on Computer Communications, Orlando, FL, 20-25 March 2012

- TMA 2012 4th COST TMA International Workshop on Traffic Monitoring and Analysis, colocated with Passive and Active Measurement (PAM 2012), Vienna, Austria, March 12-14, 2012
- IEEE CCNC 2012 The 9th Annual IEEE Consumer Communications and Networking Conference, Las Vegas, NV, 7-14 January 2012
- IEEE GLOBECOM 2011, IEEE Global Communication Conference, Orlando, Texas, US, 5- 9 December, 2011,
- IEEE CSE 2011, The 14th IEEE International Conference on Computational Science and Engineering, Dalian, China, 24-26 August 2011
- IEEE ISCC 2011, IEEE International Symposium on Computer Communications, Corfu, Greece, June 28 - August 1, 2011.
- TMA 2011, Third COST TMA International Workshop on Traffic Monitoring and Analysis, colocated with European Wireless 2011, Vienna, Austria, April 27, 2011
- IEEE ICC 2011, IEEE International Conference on Communications, Kyoto, Japan, 5-9 June 2011
- IEEE International Workshop on Cross-Layer Operation Aided Multimedia Streaming, colocated with the 73rd IEEE Vehicular Technology Conference (VTC2011-Spring), Budapest, Hungary, 15-18 May 2011,
- IEEE INFOCOM Workshop on Green Communications and Networking, Co-located with IEEE INFOCOM 2011, Shanghai, China, 10-15 April 2011
- IEEE GLOBECOM'10, IEEE Global Communications Conference, Miami, FL, USA, 6-10 December 2010
- IEEE ISCC'10, IEEE International Symposium on Computer Communications, Riccione, Italy, June 22 - 25, 2010
- IEEE ICC'10, IEEE International Conference on Communications, Capetown, South Africa, 23-26 May, 2010
- TMA'10, 2nd Traffic Monitoring and Analysis Workshop, colocated with Passive and Active Measurement Conference, Zurich, Switzerland, April 7, 2010,
- IEEE ISCC'09, International Symposium on Computers and Communications, Sousse, Tunisia, July 5 - 8, 2009.
- ITCSS-20, 20th ITC Specialist Seminar (ITCSS-20), Hoi An, Viet Nam, 18-20 May 2009,
- TMA'09, 1st Traffic Monitoring and Analysis Workshop, co-located with IFIP Networking 2009, Aachen, Germany, May 11-15, 2009,
- IEEE ICC'09, IEEE International Conference on Communications, June 14-18, Dresden, Germany, 2009,
- IEEE MP2P'08, 5th IEEE Workshop on Mobile P2P Computing, held in conjunction with the 6th IEEE International Conference on Pervasive Computing and Communications (PerCom'08), Hong Kong, China, March 17 - 21, 2008
- IEEE ICC'08, IEEE International Conference on Communications, Wireless Networking Symposium, Beijing, China, 19-23 May 2008
- IEEE IT-NEWS'08, 4th International Telecommunication NEtworking WorkShop on QoS in Multiservice IP Networks, February 2008 in Venice, Italy
- MoVeNet'07, International Workshop on Mobile Vehicular Networks, October 12, 2007, Pisa, Italy (Co-Located with IEEE MASS 2007)
- IEÉE IPCCC'07, 26th IEEE International Performance Computing and Communications Conference, April 2007, New Orleans, Louisiana, USA

2011

2010

2009

2008

2007

# **Project management**

Research Projects

Project management at Telecom ParisTech:

- NewNet@Paris (2016-2018): Cisco's Chair "NETWORKS FOR THE FUTURE" at Telecom Paris-Tech (Lead D.Rossi)
- KIC EIT ICT Labs (2015): Virtual Data Plane for Sofware defined network Content (Lead D. Perino, Nokia)
- FP7 IP mPlane (2013-2015): A monitoring Plane for the Internet (Lead M. Mellia, Polito)
   KIC EIT ICT Labs (2012-2013): Smart Ubiquitous Content (Lead R. Lo Cigno, Trento)
- Orange Labs CRE Grant (2010-2012): Locarn++ (Lead D.Rossi)
- ANR VERSO CONNET (2011–2013): Content Oriented Networking (Lead G. Carofiglio, Alcatel
- Orange Labs CIFRE Grant (2010-2012): M. Gallo PhD thesis.
- Cost IC0703 Tma (2008–2011): Traffic Monitoring and Analysis (Lead F. Ricciato, Ftw)
- Eureka Celtic Trans (2008–2010): Traffic Aware Network and Services (Lead D. Kofman, RAD)
- Eureka Celtic Tiger2 (2008-2010): Together IP, GMPLS and Ethernet Reconsidered, Phase 2 (Lead L. Ciavaglia, Alcatel-Lucent)
- Fp7 Strep Napa-Wine (2007–2010): Network Aware P2P Application over Wise Networks (Lead E. Leonardi, Politecnico di Torino)
- Eureka Celtic Tiger (2006–2008): Together IP, GMPLS and Ethernet Reconsidered (Lead N. Le Sauze, Alcatel-Lucent). Tiger received the Celtic Excellence Award in Gold.

## Previous project involvement:

- Miur Prin Mimosa (2005–2007): MIsure sperimentali e MOdelli di traffico dati multiServizio a pAcchetto (Lead Prof. A. Pattavina, Politecnico di Milano)
- Miur Prin Famous (2005–2007): Fluid Analytical Models Of aUtonomic Systems (Lead Prof. A. Lombardo, Università degli Studi di Catania)
- EuroNGI JRA.S.13 Ipam (2005–2006): Integration of Passive and Active Measurement Platforms (Lead Prof. R. Valadas, IT Aveiro)
- **Fp7 NoE EuroNGI** (2004–2006): Network of Excellence on the Next Generation Internet (Lead Prof D. Kofman, Telecom ParisTech)
- Miur Prin Pattern (2003-2005): Protocols And cross-layer Techniques To achieve Energyefficiency in Reconfigurable ad-hoc and sensor Networks (Lead Prof. G. Mazzini, Università
- Miur Firb Tango (2001–2003): Traffic models and Algorithms for Next Generation IP networks Optimization (Lead Prof. G. Prati, CNIT)

## Patents portfolio

Patents: [P26]

Kevin FAUVEL, Yong ZHAO, Zigang CAO, Maolin CHEN, Fuxing CHEN, Dario ROSSI, "Traffic Classification with a Modifiable Ruleset", Patent PCT/CN2023/080516

[P25]

Alexis HUET, Jose Manuel NAVARRO, Dario ROSSI, "Identifying and locating change points in a time series of data values", Patent PCT/EP2023/053192

[P24]

Jonatan KROLIKOWSKI, Zied BEN HOUIDI, Fuxing CHEN, Dario ROSSI, "A data-driven WLAN topologyrelated KPIs guery system and estimation method", Patent PCT/EP2023/050709

[P23]

Lixuan YANG, Alessandro FINAMORE, Fuxing CHEN, Dario ROSSI, "A device and method for network traffic classification", Patent PCT/EP2022/075646

[P22]

Alessandro FINAMORE, Lixuan YANG, Dario ROSSI, "Method to address extreme class imbalance in Al based classifiers", Patent PCT/EP2022/059292

[P21]

Jose Manuel NAVARRO, Alexis HUET, Dario ROSSI, "Aggregation of Anomalies in a Network", Patent PCT/EP2022/057757

[P20]

Zied BEN HOUIDI, Jonatan KROLIKOWSKI, Dario ROSSI, "Network resource control based on neighborhood measurements", Patent PCT/EP2022/051624

[P19]

Alexis Huet, Jose Manuel Navarro, Dario Rossi, "Root cause analysis of anomalous events in a computer network", Patent PCT/EP2021/074381

[P18] Alessandro Finamore, Massimo Gallo, Gwendal Simon, Dario Rossi, "Controller For A Cache And Method For Controlling A Cache", Patent PCT/EP2021/050902 [P17] Zied Ben Houidi, and Dario Rossi, Lorenzo del Sordo, Giulia Milan, Luca Vassio, Marco Mellia, Idilio Drago, "Honeypot entity and method of operating the same", Patent PCT/EP2021/076753 [P16] Jose Manuel Navarro, Alexis Huet, Dario Rossi, Andrian Putina, Mauro Sozio, "System and method for combining anomaly detection algorithms", Patent PCT/FR2021/000024 [P15] Lixuan Yang, Feng Jun, Dario Rossi, "Device and method for identifying unknown classes for artificial neural networks", Patent PCT/EP2021/057212 [P14] James Roberts, Dario Rossi, "Method Of Managing Data Transmission For Ensuring Per-Flow Fair Bandwidth Sharing", Patent PCT/EP2020/080037 [P13] Alexis Huet, Dario Rossi, "Detecting A Network-Induced Contribution To A Quality Of Experience Degradation", Patent PCT/EP2020/077766 [P12] Lixuan Yang, Cedric Beliard, Dario Rossi, "Devices, Methods, And System For Heterogeneous Data-Adaptive Federated Learning", Patent PCT/EP2020/061440 [P11] Jose Manuel Navarro, Dario Rossi, "Device For Monitoring A Computer Network System", Patent PCT/EP2020/052332 [P10] Alexis Huet, Dario Rossi, "Devices And Methods For Web Quality Evaluation", Patent PCT/EP2020/050319 [P9] MP Enguehard, G Carofiglio, D Rossi, "Popularity-based load-balancing for fog-cloud placement", Patent US10721295 [P8] D. Rossi, G. Rossini, "Method for managing packets in a network of Information Centric Networking (ICN) nodes". Patent US10530893B2 [P7] Giuseppe Rossini, Dario Rossi, Michele Garetto, Emilio Leonardi, "Information Centric Networking (ICN) router", Patent EP2940950B1 [P6] D. Perino, G. Carofiglio, D. Rossi, G. Rossini, "Dynamic Interest Forwarding Mechanism for Information Centric Networking", Patent EP2835942B1 [P5] D. Perino, G. Carofiglio, R. Chiocchetti, D. Rossi, G. Rossini, "Device and method for organizing forwarding information in nodes of a content centric networking", Patent EP2785014A1 [P4] M. Perino, M. Mellia, D. Rossi, M. Meo, "Method and apparatus for detecting a single data flow in an aggregate packet data flow and for identifying the application generating said single data flow", Patent US8339979B2 [P3] M. Perino, M. Mellia, D. Rossi, M. Meo, "Method and apparatus for detecting vocal data flow in a packet data flow", Patent US20100214933A1 [P2] M. Perino, M. Mellia, D. Rossi, M. Meo, "Metodo per rilevare un singolo flusso dati all'interno di un flusso aggregato di dati a pacchetti e per identificare l'applicazione generatrice del singolo flusso dati", Patent MI2007A001141 [P1] M. Perino, M. Mellia, D. Rossi, M. Meo, "Metodo ed apparato per rilevare flusso dati vocale in un flusso dati a pacchetti", Patent MI2006A002417

#### Recent keynotes, panels, etc.

Note

**Talks**: [27]

Following a list of recent selected talks, that I only seldom track, so the list is not ment to be complete.

Dario Rossi, "Foundational and specialized models for cyberdefense", Keynote speech at 49th IEEE Local Computer Networks (LCN), Caen, Normandy, France, 2024 [www]

- [26] Dario Rossi, "Xinghe Intelligent Fabric: Unleashing Computing Power in the Al Era", *Keynote speech at Huawei Network Summit (HNS)*, *Marrakesh*, May, 2024
- [25] Dario Rossi, "Foundational and specialized models for network operation", *Keynote speech at Graph Neural Networking Workshop (GNNNet), co-located with ACM CoNEXT 2023*, December, 2023 [www]
- [24] Dario Rossi, "Emerging trends in Network Al", Keynote speech at Huawei Connect Europe (HCE), DigitALL night, November, 2023
- [23] Dario Rossi, "CloudFabric 3.0: Intelligence Innovations in Cloud Networking", *Keynote speech at Huawei Network Summit (HNS)*, October, 2023
- [22] Dario Rossi, "Native network intelligence, fast and slow (with a focus on explainable AI)", *Keynote speech at Technology Innovation Institute (TII), AI Seminar Series*, June, 2023 [www]
- [21] Dario Rossi, "Beyond Al-Assisted Networking: Explainable Network Intelligence (NetXAI)", *Invited talk at LIPADE Open Days*, June, 2023 [www]
- [20] Dario Rossi, "Explainable Network Al", *Talk*, April, 2023 [www]
- [19] Dario Rossi, "The road toward more flexible and automated communication passes through Al-Native network architectures", *event-seminar at Schloss Dagsthul, Germany,* November, 2022 [www]
- [18] Dario Rossi, "Science and innovation at Huawei France", *Invited talk at Huawei Connect Europe (HCE):*Innnovation day, October, 2022 [www] [video]
- [17] Dario Rossi, "Al Native Networking", *Panel moderator at ITC34*, September, 2022 [www]
- [16] Dario Rossi, "Steps towards Al-Native networking", Keynote speech at IEEE NetSoft, June, 2022 [www]
- [15] Dario Rossi, "Huawei R+D in France", *Talk at Vivatech*, June, 2022 [www] [video] [press release]
- [14] Dario Rossi, "Emerging Trends in Al/ML and Implications for Networking Research", *Panelist at ACM SIGCOMM Networking Channel*, May, 2021 [www] [video]
- [13] Dario Rossi, "Autonomous Driving SLICES: what SLICES can bring to Network AI research", *Invited talk at SLICES RI workshop*, March, 2021 [www]
- [12] Dario Rossi, "Metrics and models for Web performance evaluation", *Invited talk at FOSDEM*, Feb, 2020 [www] [video]
- [11] Dario Rossi, "Huawei all scenario intelligent connectivity", *Invited talk at Huawei Connect Europe (HCE)*, Oct, 2020 [www]
- [10] Dario Rossi, "Networking challenges for the next decade: just a few or too many?!", *Panelist at IFIP Networking*, June, 2020 [www]
- [9] Dario Rossi, "The Long and Winding road to Self-driving networks", *Keynote speech at IFIP Networking*, June, 2020 [www]
- [8] Dario Rossi, "Bringing Artificial Intelligence to the network edge", *Keynote speech at Journees du GDR Reseaux et Systemes Distribues (RSD'20)*, January, 2020 [www]
- [7] Dario Rossi, "Al-powered Self-Driving Networks", *Invited talk at 21st MPLS+SDN+NFV World Congress*, Oct, 2019 [www]
- [6] Dario Rossi, "Put a Tiger in Your Tank What benefits can hardware bring to intelligent network operation?", *Keynote speech at IFIP Traffic Monitoring and Analysis (TMA'19)*, 2019 [www]
- [5] Dario Rossi, "The rise of hardware-assisted artificial intelligence at the network edge", *Keynote speech at IFIP Wireless and Mobile Networking Conference (WMNC'19)*, September, 2019 [www]
- [4] Dario Rossi, "Human in the QoE loop (aka the Wolf in Sheep's clothing)", *Keynote speech at 3rd International Workshop in Quality of Experience Management, in conjuction with ICIN 2019,* September, 2019 [www] [slides]
- [3] Dario Rossi, "Sheding a (deep learning) light on the operational obscurity of nowadays encrypted traffic", Invited talk at Huawei Strategic Technical Workshop (STW'19), May, 2019
- [2] D. Rossi, "Global Measurement Framework", Invited talk at Dagstuhl Seminar 13472, 2013 [www]
- [1] Dario Rossi, "Energy-Aware Networks: a Tutorial on Green Networking", *Tutorial at IEEE Networks'10*, September 27-30, 2010 [PDF]

## **Academic publications**

Note Complete list of publications by date, by type and by project as well as the list of award winning publications and a selection of the most recent ones, are available online from my webpage. Below, publications are arranged by date.

Bibliometry Up-to-date information available from my Google scholar profile

- Wang, Chao, Finamore, Alessandro, Pietro, Michiardi, Gallo, Massimo, Rossi, Dario, "Data Augmentation for Traffic Classification", *Passive and Active Measurements (PAM)*, 2024 ★[www]
  - [2] Azorin, Raphael, Monterubbiano, Andrea, Castellano, Gabriele, Gallo, Massimo, Pontarelli, Salvatore, Rossi, Dario, "Taming the Elephants: Affordable Flow Length Prediction in the Data Plane", *Proc. of CoNEXT'24 (PACMNET).*, 2024
  - [1] Francesco Cerasuolo, Alfredo Nascita, Giampaolo Bovenzi, Giuseppe Aceto, Domenico Ciuonzo, Antonio PescapÃÍ, Dario Rossi, "MEMENTO: A novel approach for class incremental learning of encrypted traffic", *Computer Networkspp. 110374*, 2024 [www]
- 2023: [19] Andrea Monterubbiano, Raphael Azorin, Gabriele Castellano, Massimo Gallo, Salvatore Pontarelli, Dario Rossi, "SPADA: A Sparse Approximate Data Structure representation for data plane per-flow monitoring", ACM CoNEXT, Dec., 2023 [www]
  - [18] Alexis Huet, Jonatan Krolikowski, Jose Manuel Navarro, Fuxing Chen, Dario Rossi, "Change Point Detection in WLANs with Random AP Forests", ACM CoNEXT, Dec., 2023 [www]
  - [17] Chao Wang, Alessandro Finamore, Massimo Gallo, Pietro Michiardi, Dario Rossi, "Toward Generative Data Augmentation for Traffic Classification", ACM CoNEXT, Student Workshop, Dec., 2023 [www]
  - [16] Andrea Monterubbiano, Raphael Azorin, Gabriele Castellano, Massimo Gallo, Salvatore Pontarelli, Dario Rossi, "Memory-efficient Random Forests in FPGA SmartNICs", ACM CoNEXT, Poster session, Dec., 2023 [www]
  - [15] Kong, Lanfang, Huet, Alexis, Rossim, Dario, Sozio, Mauro, "Tree-based Kendall tau Maximization for Explainable Unsupervised Anomaly Detection", *IEEE International Conference on Data Mining (ICDM)*, December, 2023
  - [14] Soro, Francesca, Favale, Thomas, Giordano, Danilo, Drago, Idilio, Rescio, Tommaso, Mellia, Marco, Houidi, Zied Ben, Rossi, Dario, "Enlightening the Darknets: Augmenting Darknet Visibility with Active Probes", IEEE Transactions on Network and Service Management, Vol. 20, No. 4, pp. 5012-5025, December, 2023 [www]
  - [13] Gioacchini, Luca, Vassio, Luca, Mellia, Marco, Drago, Idilio, Houidi, Zied Ben, Rossi, Dario, "i-DarkVec: Incremental Embeddings for Darknet Traffic Analysis", *ACM Trans. Internet Technol., Vol. 23, No. 3*, aug, 2023
  - [12] Kevin Fauvel, Fuxing Chen, Dario Rossi, "A Lightweight, Efficient and Explainable-by-Design Convolutional Neural Network for Internet Traffic Classification", ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD'23), aug, 2023 [www]
  - [11] Kevin FAUVEL, Yong ZHAO, Zigang CAO, Maolin CHEN, Fuxing CHEN, Dario ROSSI, "Traffic Classification with a Modifiable Ruleset", *Patent PCT/CN2023/080516*
  - [10] Azorin, Raphael, Gallo, Massimo, Finamore, Alessandro, Rossi, Dario, Michiardi, Pietro, ""It's a Match!" A Benchmark of Task Affinity Scores for Joint Learning", AAAI'23, International Workshop on Practical Deep Learning in the Wild, Feb, 2023
  - [9] Iacoboaiea, Ovidiu, Krolikowski, Jonatan, Houidi, Zied Ben, Rossi, Dario, "From Design to Deployment of Zero-touch Deep Reinforcement Learning WLANs", *IEEE Communication Magazine*, *Vol. 61*, February, 2023 [www]
  - [8] Alexis HUET, Jose Manuel NAVARRO, Dario ROSSI, "Identifying and locating change points in a time series of data values", *Patent PCT/EP2023/053192*
  - [7] Jonatan KROLIKOWSKI, Zied BEN HOUIDI, Fuxing CHEN, Dario ROSSI, "A data-driven WLAN topology-related KPIs query system and estimation method", *Patent PCT/EP2023/050709*
  - [6] Alessandro Finamore, Chao Wang, Jonatan Krolikowski, Jose M. Navarro, Fuxing Chen, Dario Rossi, "Replicating: Contrastive Learning and Data Augmentation in Traffic Classification Using a Flowpic Input Representation", ACM Internet Measurement Conference (IMC), 2023
  - [5] Jonatan Krolikowski and Zied Ben Houidi and Dario Rossi, "User-aware WLAN Transmit Power Control in the Wild", , 2023 [www]
  - [4] Bovenzi, Giampaolo, Nascita, Alfredo, Yang, Lixuan, Finamore, Alessandro, Aceto, Giuseppe, Ciuonzo, Domenico, PescapÃl, Antonio, Rossi, Dario, "Benchmarking Class Incremental Learning in Deep Learning Traffic Classification", IEEE Transactions on Network and Service Managementpp. 1-1, 2023 [www]

- [3] Franzese, Giulio,Rossi, Simone,Yang, Lixuan,Finamore, Alessandro,Rossi, Dario,Filippone, Maurizio,Michiardi, Pietro, "How Much Is Enough? A Study on Diffusion Times in Score-Based Generative Models", *Entropy, Vol. 25, No. 4*, 2023 [www]
- [2] Jose Manuel Navarro, Alexis Huet, Dario Rossi, "Meta-Learning for Fast Model Recommendation in Unsupervised Multivariate Time Series Anomaly Detection", *AutoML Conference*, 2023 [www]
- [1] Idio Guarino, Chao Wang, Alessandro Finamore, Antonio Pescape, Dario Rossi, "Many or Few Samples? Comparing Transfer, Contrastive and Meta-Learning in Encrypted Traffic Classification", Network Traffic Measurement and Analysis Conference (TMA), 2023 [www]
- 2022: [20] Matteo Boffa, Luca Vassio, Idilio Drago, Marco Mellia, Giulia Milan, Zied Ben Houidi, Dario Rossi, "On Using Pretext Tasks to Learn Representations from Network Logs", ACM CoNext workshop on Native Network Intelligence (NNI), dec, 2022 [PDF]
  - [19] Dario Rossi, Zhang Liang, "Native Network Intelligence, Fast and Slow", ACM CoNext workshop on Native Network Intelligence (NNI), dec, 2022 [PDF]
  - [18] Danilo Marinho Fernandes, Jonatan Krolikowski, Zied Ben Houidi, Fuxing Chen, Dario Rossi, "Crossnetwork transferable neural models for WLAN interference estimation", *ACM CoNext workshop on Graph Neural Networks (GNN)*, dec, 2022 [PDF]
  - [17] Stefan Nesic,Andrian Putina,Maroua Bahri,Alexis Huet,Jose Manuel Navarro,Dario Rossi,Mauro Sozio, "StreamRHF: Tree-based unsupervised anomaly detection for data streams", 19th ACS/IEEE International Conference on Computer Systems and Applications (AICCSA 2022), dec, 2022 [PDF]
  - [16] Ovidiu Iacoboaiea, Jonatan Krolikowski, Zied Ben Houidi, Dario Rossi, "From Design to Deployment of Zero-touch Deep Reinforcement Learning WLANs", *IEEE Communications Magazine (vol. to appear)*, December, 2022
  - [15] Jose Manuel Navarro, Alexis Huet, Dario Rossi, "Human readable network troubleshooting based on anomaly detection and feature scoring", *Terch.Rep.*, 2022
  - [14] Zied Ben Houidi,Raphael Azorin,Massimo Gallo,Alessandro Finamore,Dario Rossi, "Towards a systematic multi-modal representation learning for network data", *ACM HotNets*, nov, 2022 [PDF]
  - Dario Rossi,Liang Zhang, "Landing AI on Networks: An equipment vendor viewpoint on Autonomous Driving Networks", *IEEE Transactions on Network and Service Management (TNSM), Vol. 19*, sep, 2022 [PDF]
  - Jose Manuel Navarro, Alexis Huet, Dario Rossi, "Rare Yet Popular: Evidence and Implications from Anomaly Detection Datasets", *International Teletraffic Congress (ITC34)*, sep, 2022 [PDF]
  - [11] Zied Ben Houidi, Dario Rossi, "Neural language models for network configuration: Opportunities and reality check", *Elsevier Computer Communication, Vol. (to appear), pp. Pages 118-125,* Sep, 2022 [PDF]
  - [10] Roberts, James, Rossi, Dario, "Size-Based Scheduling vs Fairness for Datacenter Flows: A Queuing Perspective", ACM SIGMETRICS Perform. Eval. Rev., Vol. 50, No. 2, Sep, 2022
  - [9] Lixuan YANG,Alessandro FINAMORE,Fuxing CHEN,Dario ROSSI, "A device and method for network traffic classification", *Patent PCT/EP2022/075646*
  - [8] Alexis Huet,Jose Manuel Navarro,Dario Rossi, "Local Evaluation of Time Series Anomaly Detection Algorithms", ACM SIGKDD Conference on Knowledge Discovery and Data mining (KDD), aug, 2022 [PDF]
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  - [6] Giulio Franzese, Simone Rossi, Lixuan Yang, Alessandro Finamore, Dario Rossi, Maurizio Filippone, Pietro Michiardi, "How much diffusion time is enough?", *ICML 2022 workshop on Continuous time methods for machine learning*, June, 2022 [PDF]
  - [5] Alessandro Finamore, James Roberts, Massimo Gallo, Dario Rossi, "Accelerating Deep Learning Classification with Error-controlled Approximate-key Caching", *IEEE INFOCOM*, may, 2022 [PDF]
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  - [3] Jose Manuel NAVARRO, Alexis HUET, Dario ROSSI, "Aggregation of Anomalies in a Network", *Patent PCT/EP2022/057757*
  - [2] Zied BEN HOUIDI, Jonatan KROLIKOWSKI, Dario ROSSI, "Network resource control based on neighborhood measurements", *Patent PCT/EP2022/051624*

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- 2021: [17] Geissler, Stefan, Lange, Stanislav, Linguaglossa, Leonardo, Rossi, Dario, Zinner, Thomas, Hossfeld, Tobias, "Discrete-Time Modeling of NFV Accelerators That Exploit Batched Processing", ACM Trans. Model. Perform. Eval. Comput. Syst., Vol. 6, No. 3, dec, 2021 [www]
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  - [14] Massimo Gallo, Alessandro Finamore, Gwendal Simon, Dario Rossi, "FENXI: Fast In-Network Analytics", IEEE/ACM Symposium on Edge Computing (SEC), Dec., 2021 [PDF]
  - [13] Lixuan Yang, Alessandro Finamore, Jun Feng, Dario Rossi, "Deep Learning and Zero-Day Traffic Classification: Lessons learned from a commercial-grade dataset", *IEEE Transactions on Network and Service Management, Vol. 18, No. 4, pp. 4103–4118, December, 2021 [PDF]*
  - [12] Giampaolo Bovenzi,Lixuan Yang,Alessandro Finamore,Giuseppe Aceto,Domenico Ciuonzo,Antonio Pescape,Dario Rossi, "A First Look at Class Incremental Learning in Deep Learning Mobile Traffic", IFIP Traffic Monitoring and Analysis (TMA), September, 2021 [PDF]
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