

French, 33 yo

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languages

french (native)
english (fluent)
japanese, russian
(beginner)
spanish (high-school
level)

Career

- since Sep.2014 **Research engineer** Telecom ParisTech and LINCS, Paris, France
Distributed measurements of the Internet topology. (advisor: Dario Rossi)
- 2009–2014 **Research engineer** UPMC / LIP6 and LINCS, Paris, France
*Distributed measurements of the Internet topology – Federation of network-
ing testbeds and measurement platforms.* (advisors: Timur Friedman & Serge
Fdida)
- 2008–2009 **Research engineer** Computer Laboratory, University of Cambridge, United Kingdom
Passive measurements of very high-bandwidth links (10Gbps). (advisor: An-
drew Moore)
- 2004–2008 **Research engineer** France Télécom R&D, Issy-les-Moulineaux, France
in the context of a CIFRE convention with ENST. (advisors: James Roberts &
Daniel Kofman)

Education

- 2004–2008 **PhD thesis (defense planned by end of October 2014*)** ENST, Paris, France
*Performance guarantees for IP flows in Flow-Aware Networking: evaluation by
emulation, simulation et analytical models of a flow-level traffic engineering pro-
posal, in the context of a CIFRE convention with France Télécom R&D.*
* work related to the PhD has been completed, but the defense has been delayed
due to the different activities done afterwards. More details about the PhD at [http:
//jordan.auge.free.fr/phd](http://jordan.auge.free.fr/phd)
- 2001–2004 **Degree in Computer Science engineering** ENSIIE, Evry, France
*major in Operating Systems and Network Administration, Routing and Quality
of service, Software certification and System Security.*
- 1998–2001 **Preparatory school (French CPGE)** Lycée Joffre, Montpellier, France
major in Mathematics and Physics.
- 1998 **Baccalauréat S mention TB** Lycée Paul Valéry, Sète, France
major in Mathematics.

Publications

International peer-reviewed journals

Tools to foster a global federation of testbeds

Jordan Augé, Thierry Parmentelat, Nicolas Turro, Sandrine Avakian, Loic Baron, Mohamed Amine
Larabi, Mohammed Yasin Rahman, Timur Friedman, Serge Fdida

Computer Networks, Sp'ecial issue on Future Internet Testbeds (2014). *Elsevier*

Challenges in the capture and dissemination of measurements from high-speed networks

RG Clegg, M.S. Withall, AW Moore, I.W. Phillips, D.J. Parish, M. Rio, R. Landa, H. Haddadi, K. Kyri-
akopoulos, J. Augé

Communications, IET 3.6 (2009) pp. 957–966. *IET*

International peer-reviewed conferences

Distributed Active Measurement of Internet Queuing Delays

Pellegrino Casoria, Dario Rossi, Jordan Augé, Marc-Olivier Buob, Timur Friedman, Antonio Pescapé
Passive and Active Measurement, Extended Abstract, 2014, Los Angeles (CA)

Violation of Interdomain Routing Assumptions

Riad Mazloum, Marc-Olivier Buob, Jordan Augé, Bruno Baynat, Timur Friedman, Dario Rossi
, 2014, Los Angeles (CA)

Measurement-Based Admission Control for Flow-Aware Implicit Service Differentiation

Jordan Augé, Sara Oueslati, James Roberts
23rd International Teletraffic Congress (ITC 2011), 2011, San Francisco, USA

TopHat: supporting experiments through measurement infrastructure federation

Thomas Bourgeau, Jordan Augé, Timur Friedman
Proceedings of TridentCom'2010, 2010, Berlin, Germany

A Statistical Bandwidth Sharing Perspective on Buffer Sizing.

J. Augé, J. Roberts
International Teletraffic Congress, 2007

Buffer sizing for elastic traffic

Jordan Augé, James Roberts
Next Generation Internet Design and Engineering (NGI'06), 2006

Workshops

On multi-exit routings and AS relationships

Riad Mazloum, Marc-Olivier Buob, Jordan Augé, Bruno Baynat, Timur Friedman, Dario Rossi
ISMA'2013 - 5th AIMS workshop (*Feb. 2013*)

Towards an integrated portal for networking testbed federation, an open platform approach

Loïc Baron, Jordan Augé, Timur Friedman, Serge Fdida
FIRE Engineering workshop (*Nov. 2012*)

Update on TopHat & measurement system interconnection

Jordan Augé, Timur Friedman, Thomas Bourgeau
ISMA'2011 - 3rd AIMS workshop (*Feb. 2010*)

Overview of TopHat: Interconnecting the OneLab measurement infrastructures

Jordan Augé, Timur Friedman, Thomas Bourgeau
ISMA'2010 - 2nd AIMS workshop (*Feb. 2010*)

The 2nd Workshop on Active Internet Measurements (AIMS-2) report

KC Claffy, Emile Aben, Jordan Augé, Robert Beverly, Fabian Bustamante, Benoît Donnet, Timur Friedman, Marina Fomenkov, Peter Haga, Matthew Luckie, Yuval Shavitt
ACM SIGCOMM Computer Communication Review (CCR) 39.5 (Oct. 2009) pp. 32–36

Performance of TCP over a link using Fair Queueing

Jordan Augé, James Roberts
EuroNGI, Proceedings of Workshop on QoS and Traffic Control (*Dec. 2005*)

Fair Queueing and Congestion Control

James Roberts, Jordan Augé
Workshop on Congestion Control (*Sept. 2005*)

Selected invited talks

Some thoughts towards an intercontinental federation

Jordan Augé, Loïc Baron, Mohammed Yasin Rahman, Timur Friedman, Serge Fdida, Mohamed Amine Larabi, Thierry Parmentelat
FIRE-GENI workshop (*Oct. 2013*)

Can we define a standard interface for the measurement and monitoring plane ?

Jordan Augé, Marc-Olivier Buob, Loïc Baron, Serge Fdida, Timur Friedman

FIRE-GENI workshop (Oct. 2013)

Some development about the Future Internet in Europe

Serge Fdida, Jordan Augé, Marc-Olivier Buob, Loïc Baron, Timur Friedman

CFI'2013, The 8th International Conference on Future Internet Technologies (June 2013)

Supporting the experiment lifecycle with MySlice

Jordan Augé, Loïc Baron, Timur Friedman, Serge Fdida

GENI Engineering Conference, GEC15 (Oct. 2012)

Teaching

2014

Achieving scale: Large scale active measurement from PlanetLab

Talk and lab session @ 4th PhD School on Traffic Monitoring and Analysis (TMA), London, UK, joint work with M-O. Buob

2007–2008

Tutorials and lab sessions, Telecom ParisTech

RES101 (BCI Réseaux) et RES841 (Computer Networks - NCS)

20h

Participation to supervision

master 2 internships

Elie Roux, *Conception and realization of a Self-Protect prototype*, France Télécom R&D, 2007 – **Inês Ribeiro**, *Preparing the next-generation traceroute*, UPMC, 2011 – **Riad Mazloun**, *Reverse-Engineering the internet Routing through joint analysis of BGP and IP-level measurements*, UPMC, 2012 – **Akram Benjmaa**, *libparistraceroute*, UPMC, 2013

PhD thesis

Riad Mazloun, *Reverse-Engineering the internet Routing through joint analysis of BGP and IP-level measurements*, UPMC, since 2012

master 1 projects

A node selection and visualization tool for network and topology measurement information, UPMC, 2010/2011 – *Development of an application to visualize researchers' activity on PlanetLab*, UPMC, 2011/2012

Selected software projects

- since 2012 **MANIFOLD, TopHat, MySlice** trac.myslice.info/wiki/Manifold
 Manifold is a data integration framework for large-scale heterogeneous and distributed data. It supports the TopHat (measurement and monitoring platform interconnection) and MySlice (portal for a federation of networking testbeds) tools.
 All three software are widely used in the testbed and measurement platform community, and have been adopted within many French and EU projects. They are essential components of the OneLab experimental facility, a federation of testbeds that we are running at UPMC alongside PlanetLab Europe.
- since 2011 **libparistraceroute** www.paris-traceroute.net
 C library allowing the realization of probe-based measurement tools, including Paris Traceroute.
 Paris Traceroute mechanisms are widely used in the research community. Paris Traceroute has been proposed as a Google Summer of Code project under the M-Lab umbrella, for which I have been a mentor.
- 2004–2008 **Cross-Protect** perso.rd.francetelecom.fr/oueslati/XP.html
 Cross-Protect: a router prototype for the *Flow-Aware Networking* QoS architecture: modules for the Linux kernel, and for the ns-2 simulator.
 The software has been deposited.
- 2005–2006 **kwartoo** gna.org/projects/kwartoo
 A C++/OpenGL version of the Quarto strategy game
- 2004–2005 **gemoss** <http://sf.net/projects/gemoss/>
 reverse engineer, debugger, emulateur and free firmware for the Archos audio player, later ported as Rockbox.

Knowledge and skills

- theorie
 Probability, queueing and traffic theory; language and compilation theory; graphs and operational research; bases in cryptography
- OS
GNU/Linux and Windows: good knowledge of the kernel, as well as system and network administration
- network
 Routing and Quality of Service, network architecture and protocols
- sécurité
 Reverse-engineering, vulnerability analysis; formal logic and certified programming
- programming
 C/C++, ASM (Intel, 68k), Ruby, Python, Shell, R ...; several contributions to free software

Projects

As a research engineer

Projets running

since 2012	Fed4FIRE (EU/FP7) <i>Federation for FIRE.</i>	www.fed4fire.eu
since 2011	OpenLab (EU/FP7) <i>Future Internet Testbeds.</i>	www.ict-openlab.eu
since 2011	FIT (ANR/Equipex) <i>Future Internet (of Things).</i>	www.fit-equipex.fr
since 2011	FIBRE (EU/FP7) <i>Future Internet testbeds/experimentation between BRazil and Europe.</i>	www.fibre-ict.eu
since 2010	F-Lab (ANR) <i>Federating computing resources.</i>	www.f-lab.fr

Completed projects

2010–2012	NOVI (EU/FP7) <i>Networking innovations Over Virtualized Infrastructures.</i>	www.fp7-novi.eu/
2009–2010	CNRS--JSPS collaboration <i>Research on technologies to extend and improve the PlanetLab Europe system within the frame of the OneLab2 project – Collaboration avec les Université de Tokyo et KEIO SFC (Japon)</i>	
2009-2010	OneLab2 (EU/FP7) <i>Future Internet Testbeds.</i>	www.onelab.eu
2008–2009	MASTS (EPSRC) <i>Measurement at All Scales in Time and Space.</i>	www.mastsproject.org
2004–2006	EuroNGI (EU/FP6) <i>Network of excellence – Design and Engineering of the Next Generation Internet.</i>	www.eurongi.org