

CURRICULUM VITÆ

Personal Information

Last Name: FERET

First Name: JÉRÔME

Citizenship: French

Gender: M

Mailing address: Équipe Sémantique et Interprétation Abstraite

DI - École Normale Supérieure

45, rue D'Ulm

75230 Paris Cedex 5

France

E-mail: feret@ens.fr

Web page: <http://www.di.ens.fr/~feret/>

DIPLOMAS

Ph.D. (2005):

- Ph.D. Thesis at the *Laboratoire d'Informatique de l'École Normale Supérieure, Analysis of mobile systems by Abstract Interpretation*, PhD advisor: Patrick COUSOT; defended in February 2005.

Master's Degree (2000):

- Master's Degree in Pure and Applied Mathematics and in Computer Science at the École Normale Supérieure, Major: Abstract Interpretation, Mention: 'very good'.

CURRENT PROFESSIONAL STATUS

Current position: Research Fellow (CR1)

Institution: INRIA Paris-Rocquencourt, France

Education

- 2000-2004: PhD studies. Thesis at the *Laboratoire d'Informatique de l'École Normale Supérieure, Analysis of mobile systems by Abstract Interpretation*, PhD advisor: Patrick COUSOT. Defended in February 2005;
- 1997-2000: Master's Degree in Pure and Applied Mathematics and in Computer Science Major: Abstract Interpretation, Mention: 'very good';
- 1997-2001: École Normale Supérieure.

Professional Experience

- Oct 2008 - present: Research Fellow (CR2, then CR1 since Jan 2011) at INRIA;
- May 2011 - present: Consultant for AbsInt Angewandte Informatik GmbH, Saarbruecken, Germany;
- Oct 2007 - Feb 2010: Consultant for Plectix BioSystems Inc., Cambridge, MA, USA;
- Oct 2007 - Sept 2008: Research Fellow at Harvard Medical School – static analysis of biological networks;

- Jun 2007 - Sept 2007: Developer and Systems Designer at Plectix BioSystems Inc., Cambridge, MA, USA (design and implementation of algorithms for trace minimization in biological networks);
- Jan 2005 - Dec 2007: Research Fellow at École Normale Supérieure – ASTRÉE project;
- Sept 2004 - Dec 2004: Research Fellow at École Polytechnique – ASTRÉE project;
- Sept 2001 - Aug 2004: Université Paris-Dauphine – teaching assistant during my graduate studies;
- Jan 1999 - Jan 2000: Laboratoire d’Informatique de l’École Polytechnique (Palaiseau, France) – intern (design and implementation of a static analyzer for the π -calculus);
- Sept 1997 - Aug 2001: École Normale Supérieure – civil servant (university student in the Grandes Écoles system).

Research visits and collaborations

- 2011, University of Bologna (Italy);
- 2011, ETH Zürich (Switzerland);
- 2010, University of Cambridge (United Kingdom);
- 2009, École Polytechnique Fédérale de Lausanne (Switzerland);
- 2009, Seoul National University (Korea);
- 2007, Microsoft Research Redmond (WA, USA);
- 2006-2011, Harvard Medical School (MA, USA);
- 2005, Università degli Studi di Verona (Italy).

Awards and distinction

- Best paper award of the *Sixth International Conference on Verification, Model Checking and Abstract Interpretation* (VMCAI’05);
- Laureate of the Long-term Junior Chair of Excellence “AbstractCell” (ANR, Dec 2009-Dec 2013).
- Best paper award of *AIAA Infotech@Aerospace 2010* (AIAA’10);

Publications

- author of a publication in an international peer-reviewed journal;
- coauthor of five publications in international peer-reviewed journals;
- author of ten publications and talks in international peer-reviewed symposia;
- coauthor of seventeen publications in international peer-reviewed symposia;
- coauthor of two book chapters.

Invited talks in conferences and workshops

- 2011: Plenary invited speaker at the 18th International Static Analysis Symposium (SAS 2011), 14–16 Sept 2011, Venice, Italy.
- 2011: Plenary invited speaker at the 27th Conference on the Mathematical Foundations of Programming Semantics (MFPS 27), 25–28 May 2011, Pittsburg, USA.
- 2010: Plenary invited speaker at the 1st International Workshop on Interactions between Computer Science and Biology, 10 June 2010, Amsterdam, Netherlands.
- 2010: Special session invited speaker at the 26th Conference on the Mathematical Foundations of Programming Semantics (MFPS 26), 6–10 May 2010, Ottawa, Canada.

Invited seminars

- In France: Semantics and Abstract Interpretation (ÉNS) (×3), the students of the *Department of Computer Sciences* of the ÉNS, PPS (Paris VII) (×4), LORIA (Nancy), VERIMAG (Grenoble) (×2), the working group about concurrency (Paris VII) (×7), LIAFA (Paris VII), LABRI (Bordeaux), CEA-LIST (Saclay), DIMNP (Montpellier), IBISC (Evry), INSTITUT CURIE (Paris);
- Outside France: Formal Methods Group (Verona, Italy), Microsoft Research (Redmond, WA, USA), Department of Systems Biology of Harvard Medical School (×3) (Boston, MA, USA), Seoul National University (15 hours of lectures) (Seoul, South Korea), LANOS Working Group (EPFL, Lausanne, Switzerland), EPFL (Lausanne, Switzerland), Jena University (Jena, Germany), University of Cambridge (Cambridge, UK), Programming Methodology group at ETH Zürich (Zürich, Switzerland), Bison group at ETH Zürich (Zürich, Switzerland), University of Bologna (20 hours of lectures) (Bologna, Italy), Focus group at the University of Bologna (Bologna, Italy).

The video of my talk at Microsoft Research is available at the following URL:

<http://www.researchchannel.org/prog/displayevent.aspx?rID=19819&fID=4608>.

Ad hoc reviewing activity

- Reviewer for international conferences:
PPDP'00, ESOP'00, ESOP'01, SAS'01, TACS'01, SAS'02, VMCAI'03, FOSSACS'03, ESOP'03, SAS'03, VMCAI'04, SAC'04, ESOP'04, SAS'04, CONCUR'04, VMCAI'05, CONCUR'05, SAS'05, APLAS'05, CC'06, PLDI'06, SAS'06, APLAS'06, ASIAN'06, VMCAI'07, POPL'07, ESOP'07, FOSSACS'07, SAS'07, CONCUR'07, CSMB'07, POPL'08, VMCAI'08, SAS'08, ICALP'08, MFPS'08, CONCUR'08, POPL'09, VMCAI'09, ESOP'09, PEPM'09, FOSSACS'09, MFPS'09, SAS'09, FMICS'09, SEFM'09, CompMod'09, POPL'10, VMCAI'10, ESOP'10, CAV'10, CONCUR'10, SAS'10, VMCAI'11, ESOP'11, SAS'11, MFCS'11, VMCAI'12, VSTTE'12, ESOP'12, HSCC'12.
- Reviewer for international journals:
Transactions on Programming Languages 2001, 2006, 2007; Information and Computation 2001, 2005, 2011; Journal of Computer Science and Technology 2006; Journal of Software 2007; Journal of Computer Security 2007; Transactions of Computational Systems Biology 2008; Fundamenta Informaticæ 2009; Theoretical Computer Science 2009, 2010, 2011. Mathematical Structures in Computer Science 2011.
- External Reviewer for the Microsoft Research European PhD Scholarship program 2006, the National Science Foundation's Merit Review Process 2009 and the ANR-white program 2010.

Team activities

- Dec 2009 - present: coorganizer (with Jean KRIVINE) of the working group of computational biology at the “École normale supérieure”.

Committees

- Member of the expert committee of *the National Foundation of Research in Aeronautic and Spacial Applications* (FNRAE 2008);
- Programme committee member of the Workshop on Developments in Computational Models (DCM 2009);
- Programme committee member of the *International Workshop on Interactions between Computer Science and Biology (CS2Bio 2010)*;
- Cochair of the First Internatiobal Workshop on Static Analysis and Systems Biology (SASB 2010);
- Programme committee member of the Second *International Workshop on Interactions between Computer Science and Biology (CS2Bio 2011)*;
- Cochair of the Second *International Workshop on Static Analysis and Systems Biology (SASB 2011)*;
- Programme committee member of the Ninth *International Conference on Computational Methods in Systems Biology (CMSB 2011)*;
- Programme committee member of the Ninth *Asian Symposium on Programming Languages and Systems (APLAS 2011)*.
- Programme committee member of The Fourth *International Conference on Bioinformatics, Biocomputational Systems and Biotechnologies (BIOTECHNO 2012)*.
- Programme committee member of The *International Symposium on Foundations of Health Information Engineering and Systems (FHIES 2012)* ;
- Cochair of the Third *International Workshop on Static Analysis and Systems Biology (SASB 2012)*;
- External Reviewing Committee member of the Fortyth *ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL 2013)*. International Symposium on es arbitr

Editorial boards

- since 2011: Editorial board member of *Frontiers in Genetics*.

Recruiting committees

- 2011-2012: Committee member for the recruitment of an assistant professor at the University of Lille 1, May 2012.
- 2010-2011: Committee member for the recruitment of an assistant professor at the University of Lille 1, May 2011.

PhD Juries

- Jury member of Loïc Paulevé's PhD (École Centrale Nantes, Octobre 2011).
- Jury member of Sylvain Pradalier's PhD (École Polytechnique, September 2009).

Teaching

- 2010-2011 : Lectures (20 hours) for graduate students in the University of Bologna about abstract interpretation and its applications ;
- 2010-2011 : Lectures (8 hours) for master students at the École normale supérieure of Lyon on rule base modeling and application to biological networks ;
- 2009-2011: Lectures and practical sections (between 4 and 8 hours/year) for the program "Master to life sciences" (AIV) in the context of Vincent DANOS' course on Computational Biology;
- 2000-2011: Lectures (between 3 and 9 hours/year) for the program "Parisian Master of Research in Computer Science" (MPRI) in the context of Patrick COUSOT's course on Abstract Interpretation;
- 2008-2009: Lectures (15 hours) for graduate students in Seoul National University invited by Kwangkeun YI, on abstract interpretation and its applications ;
- 2006-2009: Lectures (2 hours/year) for the program "Parisian Master of Research in Computer Science" in the context of Vincent DANOS, François FAGES, and Vincent SCHÄCHTER's course on Formal Bioinformatics;
- 2005-2006: Lectures (4 hours) for the program "Master of Computer Science" at the University of Verona in the context of Roberto Giacobazzi's course on Automatic System Analysis and Verification;
- 2005-2007: Problem sets and sections (120 hours/year) in computer science for the students of the 'lycée Louis Le Grand' (Paris) applying to École Normale Supérieure;
- 2001-2004: Problem sets and sections (64 hours/year) in computer science for the students in the second year of the 'université Paris-Dauphine';
- 1998-2001: Problem sets and sections (80 hours/year) in computer science for the students of the 'lycée Marcelin BERTHELOT' (Saint-Maur, France) applying to École Normale Supérieure.

The lectures in the master AIV, in the MPRI on Abstract Interpretation in 2007-2008 and 2009-2011, at the University of Verona, at Seoul National University, at the École normale supérieure of Lyon, and in the University of Bologna were delivered in English; the other lectures were given in French.

Interests

- music: drums (13 years in the Music School, Jazz and Rock bands);
- sport: swimming (10 years in club), tennis (5 years in club).