

Martin BODIN

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FRANCE

Born the 30th of December 1989.
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Employment

- 2018–2019 Postdoc at the Imperial College, in London (United Kingdom) on the theoretical foundations of the analysis of real-world languages.
- 2017–2018 Postdoc at the CMM (the Center of Mathematical Modeling, part of the Universidad de Chile), in Santiago (Chile) on the formalisation of the R programming language in the Coq proof assistant.

Related Experience

- 2013–2016 Member of the SECLOUD project: www.seccloud.cominlabs.ueb.eu/.
- 2012–2016 Member of the JsCERT project: jscert.org/.
- 2012 Internship in Inria at Rennes with Alan SCHMITT and Thomas JENSEN: *A Certified JavaScript Interpreter*.
- 2011 Internship in Vrije Universiteit at Amsterdam with Dimitri HENDRIKS and Jörg ENDRULLIS: *Proving Stream Equalities in Coq*.
- 2011 Internship in PPS at Paris with Stéphane GIMENEZ and Christine TASSON: *Sequentialization of proof nets to structures*.
- 2010 Internship in Vérimag at Grenoble with David MONNIAUX: Détection de modes de fonctionnements d'un programme LUSTRE.

Education

- 2012–2016 Ph.D. in Computer Sciences at IRISA, in Rennes (France), under the direction of Alan SCHMITT and Thomas JENSEN on certified analyses of JavaScript.
- 2010–2012 Master d'Informatique (i.e. a Computer Science Master) in the École Normale Supérieure de Lyon (a French grande École—i.e. a leading institution of higher education—specialized in the formation of searchers).
- 2009–2010 Licence d'Informatique, mention très bien (i.e. a Computer Science Licence degree, magna cum laude) in the École Normale Supérieure de Lyon.
- 2007–2009 Classes préparatoires aux grandes Écoles in the lycée Henri IV in Paris (a two-years intensive course preparing to the competitive entrance of grandes Écoles).
- 2007 Baccalauréat Scientifique, mention très bien (equivalent to British A-levels with a major in Mathematics, Physics and Biology, magna cum laude).

Languages

- Native in French;
- Fluent in Esperanto;
- Notions of German.
- Good level of English;
- Average level of Portuguese;
- Basic level of Spanish;

Conferences

- 2019 Martin BODIN, Philippa GARDNER, Thomas JENSEN, and Alan SCHMITT. *Skeletal Semantics and Their Interpretations*. In POPL.
- 2018 Martin BODIN, Tomás DIAZ, and Éric TANTER. *A Trustworthy Mechanized Formalization of R*. In DLS.
- 2015 Martin BODIN, Thomas JENSEN, and Alan SCHMITT. *Certified Abstract Interpretation with Pretty-Big-Step Semantics*. In CPP.
- 2014 Martin BODIN, Arthur CHARGUÉRAUD, Daniele FILARETTI, Philippa GARDNER, Sergio MAFFEIS, Daiva NAUDŽIŪNIENĖ, Alan SCHMITT, and Gareth SMITH. *A Trusted Mechanised JavaScript Specification*. In POPL.
- 2013 Jörg ENDRULLIS, Dimitri HENDRIKS, and Martin BODIN. *Circular Coinduction in Coq Using Bisimulation-up-to Techniques*. In ITP.
- 2011 David MONNIAUX and Martin BODIN. *Modular Abstractions of Reactive Nodes using Disjunctive Invariants*. In APLAS.

Workshops

- 2019 Martin BODIN, Tomás DIAZ, and Éric TANTER. *A Trustworthy Mechanized Formalization of R*. In FMfSS.
- 2018 Martin BODIN. *A Coq Formalisation of a Core of R*. In CoqPL.
- 2016 Martin BODIN, Thomas JENSEN, and Alan SCHMITT. *An Abstract Separation Logic for Interlinked Extensible Records*. In JFLA.
- 2014 Martin BODIN, Thomas JENSEN, and Alan SCHMITT. *Certified Abstract Interpretation with Pretty-Big-Step Semantics*. In JFLA.
- 2013 Martin BODIN, Thomas JENSEN, and Alan SCHMITT. *Pretty-big-step-semantics-based Certified Abstract Interpretation (Preliminary version)*. In *Semantics, Abstract Interpretation, and Reasoning about Programs: Essays Dedicated to David A. SCHMIDT*
- 2013 Martin BODIN and Alan SCHMITT. *A Certified JavaScript Interpreter*. In JFLA.

Other Publications

2016 Martin BODIN. *Certified semantics and analysis of JavaScript*. Ph.D. thesis.

Miscellaneous

2019 Member of the Artifact Evaluation Committee for POPL.

2012, 2014 Monitoring the algorithmic practice examination for the entrance of the École Normale Supérieure.

Supervising

2019 Benjamin GUNTON, cosupervised by Philippa GARDNER

2017–2018 Tomás DIAZ, cosupervised by Éric TANTER

Teaching

2019 Separation Logic. M1 tutoring at the Imperial College London.

2018 Models of Computation. L2 tutoring at the Imperial College London.

2017 Introduction to Coq: Logic, Types, and Verification. M2 tutoring at the Universidad de Chile.

2014 Software Design and Verification. M1 tutoring at the École Normale Supérieure.

2013–2014 Formal Languages. L3 tutoring at the École Normale Supérieure.

2013–2014 Introduction to Functional Programming. L1 tutoring at the université Rennes 1.

2012 Introduction to Scheme. L1 tutoring at the Insa of Rennes.

Computer Proficiencies

- Good commands in the following programming languages: Coq, JavaScript, R, \LaTeX , OCaml, etc.
- Familiar with GNU/Linux as an operating system.
- Able to use Vim, Git, The Gimp, Inkscape, etc.

Association Experience

2017 Esperanto Meetups in Santiago.

2014–2015 Active member of Espéranto-Rennes.

2012 Treasurer of the theater association ASCREB in Rennes.

2010 Secretary of the INFO-ENS association in Lyon.

Personnal Interests

- Board games, card games, improvisation games, role playing games, etc.
- Esperanto related activities.