

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;
- Basic level of Portuguese and 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

- 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.

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.

Teaching

- 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 Introduction to Scheme. L1 tutoring at the INSA of RENNES.
- 2012, 2014 Monitoring the algorithmic practice examination for the entrance of the *École Normale Supérieure*.

Personnal Interests

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