Ali Assaf

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Experience

- *Oct 2015 - present*: **Senior Software Engineer**
  Google, Zürich, Switzerland
  Developed infrastructure for the ingestion of partner content for YouTube ContentID.
- *Mar 2012 - Aug 2012*: **Research Intern**
  INRIA Paris-Rocquencourt, Paris, France
  Translated HOL Light proofs into Dedukti, a universal proof system based on the lambda-Pi calculus modulo. (Webpage: http://dedukti.gforge.inria.fr/)
- *Apr 2011 - Jun 2011*: **Research Intern**
  LIG, Université Joseph Fourier, Grenoble, France
  Analyzed CPS simulations for algebraic extensions of the lambda calculus.
- *Jun 2010 - Aug 2010*: **Software Engineer Intern**
  Facebook, Palo Alto, USA
  Optimized a build system for static resources in PHP.
- *May 2009 - Jul 2009*: **Undergraduate Research Assistant**
  School of Computer Science, McGill University, Montreal, Canada
  Designed part of the operational semantics for Beluga, a functional programming language with dependent types. (Webpage: http://www.cs.mcgill.ca/~complogic/beluga/)

Education

- *Oct 2012 - Sep 2015:* **PhD in Computer Science**
  Ecole Polytechnique, Palaiseau, France
  Subject: *Interoperability of Proof Systems*
  Advisor: Gilles Dowek, INRIA Paris-Rocquencourt
- *Sep 2010 - Sep 2012*: **Masters of Computer Science (MPRI)**
  Ecole Polytechnique, Palaiseau, France
- *Sep 2006 - Apr 2010*: **B.Sc. Honours Mathematics and Computer Science**
  McGill University, Montreal, Canada
  Minor in Physics

Publications

Journals

- A. Assaf, A. Diaz-Caro, S. Perdrix, C. Tasson, and B. Valiron
  Call-by-value, call-by-name and the vectorial behaviour of the algebraic λ-calculus
  Logical Methods in Computer Science, volume 10, 2014

Conferences

- A. Assaf, *Conservativity of embeddings in the lambda-Pi calculus modulo rewriting*
  Submitted to Typed Lambda Calculi and Applications 2015
- A. Assaf and G. Burel, *Translating HOL to Dedukti*
  Submitted to Nasa Formal Methods 2015
- A. Assaf, *A calculus of constructions with explicit subtyping*
  Submitted to Types for Proofs and Programs 2014

Workshops

- A. Assaf and S. Perdrix, *Completeness of algebraic CPS simulations*
  Developments of Computational Models, 2011, Zurich

Awards

- Fundraising Excellence fellowship, Ecole Polytechnique Foundation, 2010-2012
- Herbert J. Brennen scholarship, McGill University, 2009-2010
- Honorable Mention, CRA Outstanding Undergraduate Researchers Award, 2009
- Dean's Honour list, Faculty of Science, McGill University

Languages

English, French, Arabic, German

Technical Skills

- Programming Languages: C/C++, Java, Python, OCaml, Rust
- Operating Systems: Linux, Windows

Other Interests

- Programming Competitions: Google Code Jam, ACM ICPC (McGill team)
- Music, piano
- Dancing, west coast swing
- Gaming, board games, video games, e-sports