

Arthur Azevedo de Amorim

Curriculum Vitæ

Education

- Aug 2011 – Sep 2017 **Ph.D., Computer Science**, *University of Pennsylvania*, Philadelphia, PA, USA.
Supervised by Benjamin C. Pierce.
- Feb 2007 – Aug 2009 **Ingénieur Polytechnicien program**, *École Polytechnique*, Paris, France.
Admitted via a double degree program with Unicamp. Specialisation in Computer Science.
- Mar 2004 – Aug 2010 **B.S., Computer Engineering**, *Unicamp*, Campinas, SP, Brazil.
Graduated first in class.

Publications

Ph.D. Thesis

Azevedo de Amorim, *A Methodology for Micro-Policies*, 2017, University of Pennsylvania, Philadelphia, USA.

Conferences

Hrițcu et al., *Testing Noninterference, Quickly*, ICFP 2013, Boston, USA.

Azevedo de Amorim et al., *A Verified Information-Flow Architecture*, POPL 2014, San Diego, USA.

Azevedo de Amorim et al., *Micro-Policies: A Framework for Verified, Hardware-Assisted Security Monitors*, Oakland S&P 2015, San Jose, USA.

Azevedo de Amorim et al., *Really Natural Linear Indexed Type Checking*, IFL 2014, Boston, USA.

Azevedo de Amorim, *Binding Operators For Nominal Sets*, MFPS 2016, Pittsburgh, USA.

Juglaret et al., *Beyond Good and Evil: Formalizing the Security Guarantees of Compartmentalizing Compilation*, CSF 2016, Lisbon, Portugal.

Azevedo de Amorim et al., *A Semantic Account of Metric Preservation*, POPL 2017, Paris, France.

Azevedo de Amorim et al., *The Meaning of Memory Safety*, POST 2018, Thessaloniki, Greece.

Journals

Hrițcu et al., *Testing Noninterference, Quickly*, *Journal of Functional Programming*, vol. 26, e4.

Azevedo de Amorim et al., *A Verified Information-Flow Architecture*, *Journal of Computer Security*, vol. 24, n6.

Books

Pierce et al., *Software Foundations*, Co-authored reference textbook on the Coq proof assistant.

Other

2013 – present **Poleiro**.
Blog about the Coq proof assistant (<http://poleiro.info>)

Research Projects

- Mar 2014 – Aug 2014 **Micro-Policies**, *INRIA — Prosecco Team*, Paris, France, Supervisor: Cătălin Hrițcu.
Formalization of security monitors with the Coq proof assistant; culminated in 2015 S&P submission.
- Apr 2009 – Jun 2009 **Metarouting**, *Computer Laboratory – University of Cambridge*, Cambridge, UK, Supervisor: Timothy Griffin.
Research internship. Worked on formalizing a language for algebraic routing using the Coq proof assistant.
- Aug 2005 – Jul 2006 **Optimisation Problems**, *IMECC – Unicamp*, Campinas, SP, Brazil, Advisor: Vera Lucia Xavier Figueiredo.
Study of classical optimisation problems in mathematics. Undergraduate research scholarship from CNPQ.

Teaching

- Winter 2016 **Coq Tutorial**, *POPL*, Saint Petersburg, USA.
An introductory tutorial to the Coq proof assistant.
- Fall 2015 **Coq Tutorial**, *CUFP*, Vancouver, Canada.
An introductory tutorial to the Coq proof assistant.
- Spring 2013, Fall 2014 **Teaching Assistant**, *UPenn*, Philadelphia, PA, USA.
CIS 500 – Software Foundations. Graduate-level course on programming-language semantics using the Coq proof assistant.
- Fall 2012 **Teaching Assistant**, *UPenn*, Philadelphia, PA, USA.
CIS 120. Undergraduate-level programming course in OCaml and Java
- Aug 2009 – Jul 2010 **French Teacher**, *Projeto CPL, Unicamp*, Campinas, SP, Brazil.
Free French course open to the local community
- Mar 2006 – Jun 2006, Aug 2006 – Dec 2006 **Undergraduate Teaching Assistant**, *Unicamp*, Campinas, SP, Brazil.
Courses: MA141 – Analytic Geometry and MC102 – Algorithms and Computer Programming.

Professional

- Summer 2012 **Programmer**, *ML State*, Paris, France.
Work on the Opa web programming language
- Aug 2010 – Aug 2011 **Manager, Programmer, Product Developer**, *Umamão*, Campinas, SP, Brazil.
Helped co-founding web start-up Umamão. Development of Q&A website in Ruby on Rails.
- Aug 2008 – Sep 2008 **Art Gallery Attendant**, *Galerie Bremer*, Berlin, Germany.
Summer job for the *stage ouvrier* program at École Polytechnique.

Languages

Portuguese Native speaker
English Fluent
French Fluent

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German Intermediate
Spanish Intermediate
Greek Intermediate