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Personal Info

Date of Birth: November 25, 1984.

Place of Birth: Rosario, Argentina.

Nationality: Argentine / Spanish.

Education

Universidad Politécnica de Madrid **Madrid, Spain**
Ph.D. in Computer Science, Expected: July, 2017. 2011–2017

Dissertation: *Hoare-style Reasoning with Higher-Order Control: Continuations & Concurrency.*

Advisor: Dr. Aleksandar Nanevski.

Universidad Nacional de Rosario **Rosario, Argentina**
Licenciate in Computer Science, Final Grade: 8.87 / 10. 2003–2010

(5 years + thesis project, undergraduate degree in Computer Science.)

Undergraduate thesis: *Program Calculation with Applicative Functors.*

Advisors: Dr.rer.nat Alberto Pardo, UDELAR; Dr. Mauro Jaskelioff, UNR / CIFACIS - CONICET.

Employment

IMDEA Software Institute **Madrid, Spain**
Ph.D. candidate Oct. 2011 –

Advisor: Dr. Aleksandar Nanevski.

IMDEA Software Institute **Madrid, Spain**
Research intern Dec. 2010 – Sep. 2011

Supervisor: Dr. Aleksandar Nanevski.

Universidad Nacional de Rosario. Computer Science Dept. **Rosario, Argentina**
Teaching Assistant Dec. 2008 – Dec. 2010

INRIA. Centre de Sophia-Antipolis Méditerranée **Sophia-Antipolis, France**
Research Intern Apr. 2008– Oct. 2008

Team: PULSAR. Supervisor: Dr. Annie Ressouche.

Universidad Nacional de Rosario. Computer Science Dept. **Rosario, Argentina**
Teaching Assistant Aug. 2007 – Mar. 2008

Publications

G. A. Delbianco, I. Sergey, A. Nanevski, and A. Banerjee. Concurrent data structures linked in time. In *ECOOP 2017 - Object-Oriented Programming - 31st European Conference, Barcelona, Spain - June 21 - 23, 2017, Proceedings (to appear)*, 2017. A preliminary version of this paper is available from arXiv: <http://arxiv.org/abs/1604.08080>.

I. Sergey, A. Nanevski, A. Banerjee, and G. A. Delbianco. Hoare-style specifications as correctness

conditions for non-linearizable concurrent objects. In *ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications, OOPSLA*, 2016.

A. Nanevski, R. Ley-Wild, I. Sergey, and G. A. Delbianco. Communicating state transition systems for fine-grained concurrent resources. In *Programming Languages and Systems - 23rd European Symposium on Programming, ESOP*, 2014.

G. A. Delbianco and A. Nanevski. Hoare-style reasoning with (algebraic) continuations. In *ACM SIGPLAN International Conference on Functional Programming, ICFP*, 2013.

G. A. Delbianco, M. Jaskelioff, and A. Pardo. Applicative shortcut fusion. In *Trends in Functional Programming, TFP*, 2011.

Selected Talks

- Concurrent Data Structures Linked in Time. The 5th ACM SIGPLAN Workshop on Higher-Order Programming with Effects (HOPE 2016). Collocated with ICFP 2016. Nara, Japan. September 18th 2016. (*Accepted Talk*)
- Concurrent Data Structures Linked in Time. VT Seminars-Computer Science Department, University of Sheffield. Sheffield, UK. May 6th, 2016. (*Invited Talk*)
- Concurrent Data Structures Linked in Time. 3rd Microsoft Research-IMDEA Collaboration Workshop (MICW). Cambridge, UK. May 4th, 2016. (*Invited Talk*)
- Concurrent Hoare Style Reasoning, De-constructed. SELEN Seminar Series. Department of Computer Science. National University of Rosario. Rosario, Argentina. November 7th, 2014. (*Invited Talk*)
- Hoare-Style Reasoning with Algebraic Continuations. Department of Computer Science. National University of Rosario. Rosario, Argentina. November 21st 2013. (*Guest lecture at the Formal Program Development in Type Theory (T-521) course*)

Software Projects & Tools

HTTcc: Main contributor. A separation logic for a stateful functional programming language with high order control operators [3]. Developed as a *shallowly-embedded* domain-specific language (DSL) in Coq/ssReflect.

<http://delbian.co/HTTcc>

FCSL: Contributor. FCSL is the first completely formalized framework for mechanized verification of full functional correctness of fine-grained concurrent programs. It is implemented as an embedded DSL in the dependently-typed language of the Coq proof assistant [1,2,5].

<http://software.imdea.org/fcsl/>

Academic Service

External Reviewer: LICS 2015, ICFP 2013, MFCS 2012.

Teaching

Universidad Nacional de Rosario. School of Exact Sciences. Computer Science Department.

Data Structures (T-312): Spring 2007, Fall 2008: Teacher Assistant (T. A.) to Dr. Pablo Martínez López. Fall 2009: T. A. to Dr. Mauro Jaskelioff.

Functional Programming (T-321): Spring 2006, Fall 2007: *Ad Honorem* T. A. to Dr. Pablo Martínez López. Spring 2008: T. A. to Dr. Pablo Martínez López. Spring 2009: T. A. to Dr. Mauro Jaskelioff.

Introduction to Category Theory (T-323): Spring 2009: T. A. to Dr. Gabriela Argiroffo.

Type Systems (T-52x): Fall 2009, Spring 2009, Fall 2010: T. A. to Dr. Pablo Martinez López.

Languages

Spanish: Mother tongue.

English: Proficient Speaker, CEFR C2.

Certificates: U. of Cambridge CPE; U. of Michigan CPE.

French: Independent Speaker, CEFR B1.

Certificates: DELF A1.

References

Dr. Aleksandar Nanevski
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Dr. Ilya Sergey
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