

# Luis A. Mastrangelo

## Curriculum Vitae

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### Personal Details

Date of birth 31/01/1981  
Place of birth Ciudad Autónoma de Buenos Aires, Argentina  
Nationality Argentine  
Marital status Single

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### Educational Background

- Apr 2007–Nov 2011 **Licentiate in Computer Science**, *Faculty of Exact and Natural Sciences, University of Buenos Aires*, Buenos Aires, Argentina.  
The Licentiate in Computer Science degree requires 17 mandatory courses, 12 points obtained by talking elective courses (elective courses award between 1 and 4 points), and a final thesis which is expected to be on a technical topic in which the student makes a personal contribution. The degree is designated to be completed in 5 years. However before starting the degree a one year university admissions must be completed. In other words, the Licentiate in Computer Science degree is a 1+5+thesis degree, and as such is considered by many institutions as being equivalent to an M.Sc. degree. From the 17 mandatory courses, 13 must be passed in order to obtain the intermediate Computer Analyst degree. This degree is a 3 year degree.  
Advisor: Prof. Sergio Yovine, Prof. Philippe Clauss  
Licentiate Thesis: “Dynamic Analysis and Transformation of Programs for Automatic and Speculative Parallelization: Contributions and Perspectives”.
- Apr 2003–Dec 2006 **Computer Analyst**, *Faculty of Exact and Natural Sciences, University of Buenos Aires*, Buenos Aires, Argentina.
- Mar 1994–Nov 1999 **Secondary School Diploma (Technical Computer)**, *Technical School No. 3 María Sánchez de Thompson*, Buenos Aires, Argentina.  
Specialization in informatics

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### Research Experience

- Last position **Ph.D. Graduate, Computer Science**, *University of Lugano*, Switzerland.  
Apr 2013–June 2019 Subject: programming languages, software verification and validation, virtual machines and operating systems and concurrency and declarative programming.  
Advisors: Prof. Matthias Hauswirth and Prof. Nathaniel Nystrom  
Ph.D. Thesis: “When and How Java Developers Give Up Static Type Safety”
- Jul 2012–Nov 2012 **Ph.D. Student, Computer Science**, *University of Luxembourg*, Luxembourg.  
Subject: automatic model based testing with focus on embedded systems.  
Advisor: Prof. Lionel Briand
- Apr 2011–Oct 2011 **Internship**, *INRIA/University of Strasbourg*, Strasbourg, France.  
Internship title: “A Virtual Machine for Automatic Program Parallelization”.

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## Publications

Alexandra Jimborean, Philippe Clauss, Benoît Pradelle, **Luis Mastrangelo**, and Vincent Loechner. Adapting the polyhedral model as a framework for efficient speculative parallelization. PPOPP '12, pages 295–296, New York, NY, USA, 2012. ACM. Poster Paper.

Alexandra Jimborean, **Luis Mastrangelo**, Vincent Loechner, and Philippe Clauss. VMAD: an Advanced Dynamic Program Analysis & Instrumentation Framework. CC '12, pages 220–237, Tallinn, Estonie, March 2012. Springer.

**Luis Mastrangelo** and Matthias Hauswirth. JNIF: Java Native Instrumentation Framework. PPPJ '14, pages 194–199, New York, NY, USA, 2014. ACM.

**Luis Mastrangelo**, Luca Ponzanelli, Andrea Mocci, Michele Lanza, Matthias Hauswirth, and Nathaniel Nystrom. Use at Your Own Risk: The Java Unsafe API in the Wild. OOPSLA '15, pages 695–710, New York, NY, USA, 2015. ACM.

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## Professional Experience

- Dec 2006–Mar 2011 **Software engineering**, *Rekursiva S.R.L.*, Buenos Aires, Argentina.  
Software developer, software architect and project leader.  
Most important customers: ABB, Bayer, Coca-Coca, Repsol/YPF.
- Dec 2010–Jan 2011 **Freelance project**, *vCelebrate*, Buenos Aires, Argentina.  
Technologies used: Facebook API and Adobe Flex.
- Apr–Dec 2008 **Freelance project**, *Andrea Importadora*, Buenos Aires, Argentina.  
Technologies used: ASP.NET and MySQL.
- Mar–Jul 2006 **Network administrator**, *HS Eventos*, Buenos Aires, Argentina.  
Technical service, software installation and maintenance of company network.
- Feb–Apr 2006 **Freelance project**, *Reid Systems, ApareSer*, Buenos Aires, Argentina.  
Technologies used: ASP.NET, C# and SQL Server 2000.
- Apr–Oct 2005 **Freelance project**, *Dream On*, Buenos Aires, Argentina.  
Technologies used: C# and PostgreSQL.
- Jul–Oct 2004 **Network administrator**, *Texpampa*, Buenos Aires, Argentina.  
Technical service, software installation and maintenance of company network.
- Mar 2000–May 2004 **Software developer**, *Fernando Hermo y Asoc.*, Buenos Aires, Argentina.  
Technologies used: Visual Basic 6.0, Microsoft Access, SQL Server and Crystal Reports.  
Technical support to customers on-line and on-site.

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## Language Proficiency

- Spanish **Native speaker**
- English **Proficient User**: Level C2 under CEFR
- Italian **Independent User**: Level B2 under CEFR
- French **Independent User**: Level B1 under CEFR