

Luis Mastrangelo

Hohlstrasse 485a 8048 Zurich, Switzerland ℘ +41 789 44 2022 ⊠ luismastrangelo@gmail.com ʿ⊡ acuarica.github.io/

Software Development Engineer

Education

 Apr 2013–June 2019 Ph.D. Graduate, Computer Science, University of Lugano, Switzerland. Programming languages research in Java, Scala and Haskell, runtime systems and virtual machines with C++, software verification, data analysis using R and Python.
Apr 2007–Nov 2011 Licentiate in Computer Science, University of Buenos Aires, Argentina.

This degree is considered by many institutions as being equivalent to an M.Sc. degree.

Apr 2011–Oct 2011 Internship, INRIA/University of Strasbourg, France. Internship title: "A Virtual Machine for Automatic Program Parallelization".

Apr 2003–Dec 2006 **Computer Analyst**, *University of Buenos Aires*, Argentina. This is a 3 years degree as part of the *Licentiate in Computer Science* programme.

Professional Experience

Jul 2022–Jan 2023	Senior Blockchain Engineer, ConsenSys, Remote.
	Truffle team, a development environment for Ethereum Solidity Smart Contracts
May 2022–Jun 2022	Lead Blockchain Engineer, Campground, Remote.
	NEAR Smart Contract development with Rust and TypeScript
Sep 2020–Apr 2022	Senior Software Engineer, EPAM Systems, Zurich, Switzerland.
	Ethereum & NEAR blockchains development with Solidity, Rust and TypeScript
Aug 2019–Jan 2020	Technical Consultant , <i>DB&L Services SA for Avaloq</i> , Lugano, Switzerland. IT infrastructure support for Monitoring Operations at Avaloq Sourcing (CH & LI) SA.
Dec 2006–Mar 2011	Project Leader, Recursiva S.R.L., Buenos Aires, Argentina.
	Software engineering and architect roles using Java and C $\#$ among others technologies.
Mar–Jul 2006	Network Administrator, HS Eventos, Buenos Aires, Argentina.
	Technical service, software installation and maintenance of company network.
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.
	ERP and CRM development using VB 6, SQL Server and Crystal Reports.
	Freelance & Open Source Projects
Jan–May 2020	Software Engineer, GTM Dashboard Open Source project, Remote.
	Web dashboard for Git Time Tracking. Written in Go, Rust, TypeScript and Svelte.
Feb 2014–Jan 2020	Software Developer, JNIF, Lugano, Switzerland.

Java Native Instrumentation Framework written in C++.

May–Sep 2018	Software Developer , <i>Essentia, Family Office</i> , Lugano, Switzerland. Desktop application written in Scala.
May–Jun 2018	Software Engineer , <i>GTM Open Source project (contribution)</i> , Remote. Add support for submodules in Git Time Tracking. Written in Go. Pull Request.
Oct-Nov 2017	Software Developer , <i>Essentia, Family Office</i> , Lugano, Switzerland. Desktop application written in C#.
Apr 2016-Oct 2017	Software Developer , <i>HSC</i> , Remote. A Supercompiler prototype for Haskell.
Dec 2010–Jan 2011	Web Developer , <i>vCelebrate</i> , Buenos Aires, Argentina. Web application using Facebook API and Adobe Flex.

Technical Skills

Languages

Scala, JavaScript/TypeScript, C/C++, C#, Haskell, Go, Python, R, SQL, UML Paradigms & Fields OOP, Function Programming, Static & Dynamic Analysis, Data Science Databases Design, Oracle PL/SQL, Datalog/QL, PostgreSQL, MySQL, SQL Server, SQLite Editors & Tools VSCode, Git, IntelliJ/CLion/Rider, Eclipse, Xcode, Vim/Emacs, Linux, Apache

Solidity, Blockchain, Ethereum, NEAR, Smart Contracts, Rust, Java, Kotlin,

Teaching Experience

Apr 2013–Nov 2017 Teaching Assistant, University of Lugano, Switzerland. Multiple courses.
Apr 2006–Nov 2010 Teaching Assistant, University of Buenos Aires, Argentina. Multiple courses.
Apr–Oct 2008 Scientific Popularizer, Informatics dpt., University of Buenos Aires, Argentina.

Publications

University of Lugano	Luis Mastrangelo , Ph.D. Thesis, Advisors: Prof. M. Hauswirth and Prof. N. Nystrom. When and How Java Developers Give Up Static Type Safety. 2019
University of Lugano	Luis Mastrangelo , M. Hauswirth and N. Nystrom. Casting about in the Dark: A Survey of Cast Usage in Java. 2019
University of Lugano	Luis Mastrangelo , L. Ponzanelli, A. Mocci, M. Lanza, M. Hauswirth and N. Nystrom. Use at Your Own Risk: The Java Unsafe API in the Wild. 2015
University of Lugano	Luis Mastrangelo and M. Hauswirth. JNIF: Java Native Instrumentation Framework. 2014
,	A. Jimborean, Luis Mastrangelo, V. Loechner and P. Clauss. VMAD: an Advanced Dynamic Program Analysis & Instrumentation Framework. 2012
,	A. Jimborean, P. Clauss, B. Pradelle, Luis Mastrangelo and V. Loechner. Adapting the Polyhedral Model for Efficient Speculative Parallelization. 2012

Language Proficiency

SpanishNative speakerEnglishProficient User: Level C2 under CEFRItalianProficient User: Level C1 under CEFRFrenchIndependent User: Level B1 under CEFR