JUAN LOPES

SOFTWARE ENGINEER

⚲ Rio de Janeiro, Brazil   @ me@juanlopes.net   ⚇ juanlopes.net   ⌨ github.com/juanplopes   ⟳ July 23, 2020

EXPERIENCE

Software Engineer, Game Server
Zwift

⌗ Jun 2020 – Ongoing (2 mos)   ⚲ Rio de Janeiro / Long Beach, CA

- Improving near real-time communication in a massively multiplayer online game;
- Creating spatial algorithms to deal with scalability challenges through indexing and partitioning of active players.

Software Engineer, R&D
Intelie, a RigNet Company

⌗ Aug 2011 – May 2020 (8 yrs 9 mos)   ⚲ Rio de Janeiro / Houston / London

- Responsible for the Core Platform roadmap and implementation;
- Created Pipes, a stream processing language (⚇ **pipes.intelie.com**).

Software Engineer
Living Consultoria

⌗ Dec 2007 – Aug 2011 (3 yrs 8 mos)   ⚲ Rio de Janeiro

- Delivered projects for several customers around the globe, with great focus on billing solutions;
- Member of the architecture committee.

Software Engineering Intern
Biologica Sistemas

⌗ Feb 2007 – Dec 2007 (11 mos)   ⚲ Rio de Janeiro

- Responsible for a Java-based webservice for batch biometric authentication, integrating with C++ code;
- Mantainer of a UI written in C# for biometric capture, that was used in large-scale public tenders in Brazil.

EDUCATION

Ph.D. in Systems Engineering and Computer Science
Federal University of Rio de Janeiro

⌗ Jun 2017 – Ongoing, GPA: 4.0

Ongoing: researching graph stream algorithms

M.Sc. in Computational Sciences
State University of Rio de Janeiro

⌗ Mar 2014 – Mar 2017, GPA: 3.8

Probabilistic data structures applied to implicit graph representation

B.Sc. in Informatics and Information Technology
State University of Rio de Janeiro

⌗ Jan 2006 – Aug 2013, GPA: 3.0

MOST INTERESTED IN

I love algorithms & data structures, software optimization, and compilers. I enjoy bridging the gap between theoretical and applied computer science through code.

MOST PROUD OF

♥ **Miguel**
My beloved son.

★ **QConSP Program Committee**
QCon is a prestigious international software conference. After many years as a regular speaker, in 2018, I was invited to be part of the Program Committee, hosting the Computer Science track in the São Paulo edition.
⚇ qconsp.com/sp2020/track/ciencia-da-computacao-no-mundo-real

🏆 **Master's Thesis Award**
My master's thesis "Probabilistic data structures applied to implicit graph representation" was chosen as one of the top 9 theses of 2017 by the Brazilian Computer Society.
⚇ sol.sbc.org.br/index.php/ctd/issue/view/233

👥 **Competitive Programming**
I really enjoy programming contests. In the IEEEXtreme, I have once won a 1st place in Brazil (2013) and 34th place worldwide (2014). In the ICPC, I was five times South-American finalist. My most popular GitHub repository is a collection of problems solved in my early training years.
⌨ github.com/juanplopes/icpc

🗒 **StackOverflow Reputation**
I have a 9k+ reputation on StackOverflow, which is not a huge number, but this still makes me proud, given I mostly answer questions in the not-so-popular [algorithm] tag.
⚇ stackoverflow.com/users/1327235

⧗ **Recent Work**
I have recently been fiddling with JVM introspection and heap overhead.
⌨ github.com/intelie/introspective
Using that library, I have managed to create an aggressively optimized implementation of java.util.Map:
⌨ github.com/intelie/tinymap