

Hi, I'm Juan Lopes

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Brazilian, lives in Rio de Janeiro.

Interested in algorithms, optimization, programming contests and serif typefaces.

B.S. in Computer Science; M.S. candidate in Computer Science.

Writes high-performance Java code at Intelie for the last 5 years.

Wrote beautiful C# code at Living Consultoria for the 4 years before.

What excites me?

I love code in all its forms. Love writing and love reading. I'm a programmer since I was 9, when discovered that QBasic used to come with Windows 95.

During the undergrad years, I had the chance to expand my interest in **algorithms**. There I was introduced to **programming contests**. I attended to six editions of **ICPC** (2007 to 2012), being **south-american finalist** in five of them. Also went to several editions of the **IEEEExtreme** competition. Our best results were **1st place in Brazil** (2013) [4] and **36th place in the world** (2015) [5].

I like **Coding Dojos** a lot. Here in Rio, I help to organize the DojoRio [6] meetings. We probably have the most active Brazilian dojo community. As of today, there were **more than 250 sessions** (once a week, every wednesday). I think Coding Dojos are a great opportunity to try new languages, new problems and talk to great programmers.

Recently, as a part of my work at *Intelie*, I've been studying (and coding) a lot about **time-series analysis** and **real-time optimized algorithms**. As a result, I've been giving talks about it, from which I highlight the latest about **probabilistic data structures** (*HyperLogLog*, *Count-Min sketch*, etc.) at QCon São Paulo 2013 [7]. This is also the main topic of my master's thesis.

Last, but not least, I have a strong presence in many programming communities, not only Java or C# ones. My **GitHub** [2] can show that I'm not shy to try new technologies. I also have **6,000+ reputation** points on **StackOverflow** [3], being half of this in the *algorithms* tag.

Where did I work?

Intelie (August 2011 – Now)

I currently work in the R&D team at **Intelie**, a company focused in building tools for operation intelligence. There I write a lot of **Java** code. As a former C# programmer, I'm surprisingly liking it.

Most systems I write today use heavy backend algorithms to analyze real-time data streams at a rate of a **few terabytes per day**. Most of it would be impossible if we didn't use **distributed algorithms**.

My main contribution there is **Intelie Pipes** [1], a parallelizable stream processing engine and language. Working on it, I learned a lot about compilers, bytecode emitting and parallel streaming algorithms.

There I also had a very particular experience with **Lucene**, adapting its core to support indexing tens of billions of log messages per Lucene index, with sub-second distributed query, for the largest brazilian media group.

Living Consultoria (December 2007 – July 2011)

At **Living Consultoria** I started as a junior programmer and left as a mix of **lead developer** and **architect**. The focus of the company was Microsoft technologies, so I spent most of my time writing **C#**, but I also worked with **Ruby** (on and off Rails) and some **PHP**. There I played a major role implementing the first projects using **Scrum** in the company (back in 2008, when it was still cool); participated in some **international projects**, collaborating with teams from many countries. Traveled to Amsterdam a couple of times, because of this.

Where did I study?

Today I'm a **Master's candidate** in **Computer Science** at **UERJ** (en: *Rio de Janeiro State University*). It is one of the largest Brazilian universities. I'm currently writing about **probabilistic data structures**. I published a few papers about the subject.

I also have acquired my Bachelor's degree in Computer Science at **UERJ**. Finished in 2013. Actually I finished the regular course in 2009, but stayed there to be able to compete in the ICPC. I graduated with an essay about **polynomial-time regular expression implementations** [9].

How to find me?

Probably the best way to find me is my e-mail [me@juanlopes.net]. I'm also pretty active on Twitter [[@juanlopes](https://twitter.com/juanlopes)].

Links

Some links are in portuguese.

1. [Intelie Pipes website](#)
2. github.com/juanlopes
3. stackoverflow.com/users/1327235/juan-lopes
4. [IEEEExtreme 7.0 results by country](#)
5. [IEEEExtreme 9.0 webpage \(results pending\)](#)
6. DojoRio.org
7. [QCon SP 2013 talk: Analyzing and Reducing Big Data Streams in Real-Time](#)
8. [QCon RJ 2015 talk: Does Lucene Scale?](#)
9. github.com/juanlopes/pyrex