# Luiz Cavalcanti

## Software Engineer

## Experience

#### 2019- Lead Software Engineering Consultant, Thoughtworks, São Paulo, Brazil

- Development of backend software in Python, Java and Ruby, ranging from banking to streaming media management;
- Planning and implementation of software delivery pipelines, enforcing shift-left quality culture, independent deployability and observability in a variety of business environments;
- Consulting, stakeholder management and roadmap planning for improving delivery of software across several organizations.

#### 2018–2019 Systems Specialist, Locaweb, São Paulo, Brazil

- Creation of cloud services such as Windows-based Virtual Private Servers (VPS);
- Refactoring of legacy cloud backend and infrastructure applications;
- Assisting discontinuation of legacy services.

#### 2017–2018 Developer, Codus Tecnologia, São Paulo, Brazil

- Evolution and maintenance of a leading online wine retailer in Ruby on Rails and PostgreSQL in Heroku platform;
- o Creation of a B2B MVP to a major financial market player with Ruby on Rails in a Docker Swarm environment.

#### 2016–2017 Freelance developer, Self-employed, São Paulo, Brazil

- O Designed and implemented integration for industrial automation solutions for remote international clients;
- O Design and developed web-based solutions to small businesses with Python/Django.

#### 2014–2016 **Software developer**, *INDT - Microsoft*, Manaus, Brazil

- o Planned and created tools for digital image quality analysis using image recognition algorithms;
- o Implemented and shipped image processing solutions to printer drivers on Linux, Mac and Windows.

#### 2011–2014 Software developer, INDT - Nokia, Manaus, Brazil

- Implemented and delivered Digital TV for Nokia X platform;
- o Designed, implemented and shipped Nokia/HERE Transit for Series 40 (Nokia Asha) for a global release;
- $\,\circ\,$  Implemented and shipped SMS-Based solution to thousands of Nokia Series 30 mobile phones;
- Helped junior team members to understand agile development and tutored them on best software engineering practices.

#### 2007-2011 Software Developer, Software architect, Teclogica, Blumenau, Brazil

- Implemented Warehouse Management System with full automation to the largest tobacco company in the world;
- Maintained and refactored the architecture of a large (500+ users) distributed Harvest Management System for Linux servers and Windows Mobile clients while in production;
- O Design, planning and implementation of Android tablet solution to construction industry;
- Designed and implemented tools for CMMI level 2 & 3 certification.

#### 2001–2007 **Software developer**, *Various*, Brazil

- Designed, implemented and shipped commercial software, ranging from PoS, CRM to ERP backend;
- $\,\circ\,$  Taught Java and general programming courses for undergraduates.

### Skills

Languages Java, Ruby, Python, C, C++, Rust

Databases MongoDB, Redis, PostgreSQL, MariaDB, Oracle, SQLServer

Tools Git, Docker, Kubernetes, several CI/CD solutions

Practices Agile, Code Review, Continuous Integration, Continuous Deployment, TDD

#### Education

2014-2016 Master's degree, Federal University of Amazonas, Manaus, Brazil

Computer science. Robotics & Computer Vision lab

Dissertation: Anthropic elements detection in Amazon Forest's aerial images

2005–2006 Specialist degree, FURB, Blumenau, Brazil

Web Software Development.

Dissertation: Using constraint satisfaction algorithms to solve educational resource allocation problems

2001–2004 **Undergraduate degree**, *CEFET-AL*, Maceió, Brazil Information Technology. Research on software engineering

## Languages

English: Fluent; Portuguese: Native; Spanish: Basic

#### Interests

Digital Image Processing Complexity analysis

Machine learning

Hardware emulation and simulation

#### **Publications**

2015 A Comparison on Supervised Machine Learning Classification Techniques for Semantic Segmentation of Aerial Images of Rain Forest Regions

Proceedings of the 10th International Conference on Computer Vision Theory and Applications - Berlin DOI: 10.5220/0005300004980504

2013 HERE transit for series 40: a location based application for public transport on feature phones SIGGRAPH Asia 2013 Symposium on Mobile Graphics and Interactive Applications - Hong Kong DOI: 10.1145/2543651.2543685

2013 A SMS-based application store for emerging market: a case study SIGGRAPH Asia 2013 Symposium on Mobile Graphics and Interactive Applications - Hong Kong DOI: 10.1145/2543651.2543654

2013 A Mobile-Based System for Content Delivery over SMS

6th International Conference on MOBILe Wireless MiddleWARE, Operating Systems, and Applications - Bologna DOI: 10.1109/Mobilware.2013.8