

# Luiz Cavalcanti

Software Developer

Sao Paulo, Brazil  
+55 (11) 94867 6339  
cavalcanti.luiz@gmail.com  
<http://cavalcanti.info>

## Experience

- 2016–now **Freelance developer, Self-employed**, São Paulo, Brazil.
- Designed and implemented integration for industrial automation solutions for remote international clients;
  - Design and developed web-based solutions to small businesses with Python/Django.
- 2014–2016 **Software developer, INDT - Microsoft**, Manaus, Brazil.
- Planned and created tools for digital image quality analysis using image recognition algorithms;
  - 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;
  - Designed, implemented and shipped Nokia/HERE Transit for Series 40 (Nokia Asha) for a global release;
  - 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;
  - 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;
  - Teached Java and general programming courses for undergraduates.

## Skills

Languages Java, Python, C, C++, C#, Objective-C, MATLAB, Shell Script, SQL  
Databases Oracle, PostgreSQL, MySQL, SQLServer, db4o  
Tools Git, Jenkins, Gerrit/Phabricator, emacs, build tools, Docker, Vagrant  
Practices Scrum, 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:** Intermediate

## Interests

Digital Image Processing  
Complexity analysis

Machine learning  
Functional programming

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## 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