

Daniel Câmara

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OBJECTIVES

Work in a high quality institution developing high quality and useful software components

HIGHLIGHTS OF QUALIFICATIONS

- PhD in Computer Science working with formal verification (*Federal University of Minas Gerais – Brazil*)
- PhD in Telecommunications, working with public safety networks (*Telecom ParisTech - France*)
- Software quality consultant
- Experience with test driven development and continuous integration
- Extensive experience programming in C/C++, Python, Java and Javascript
- Experience with data mining and Statistical Analysis
- Experience with heuristics and other artificial intelligence techniques

EDUCATION

ÉCOLE NATIONALE SUPÉRIEURE DES TÉLÉCOMMUNICATIONS, TÉLÉCOM PARIS, *April 2010*
PhD. in Computer Science from Télécom ParisTech, working at the EURECOM in Sophia-Antipolis, mention summa cum laude (“*Très bien*”)
Thesis title: Techniques to support alert and crisis management in public safety networks

FEDERAL UNIVERSITY OF MINAS GERAIS, Minas Gerais, Brazil *November 2009*
PhD. in Computer Science working with formal verification of communication protocols – GPA 4.0/4.0
Thesis title: Formal Verification of Communication Protocols for Wireless Networks

FEDERAL UNIVERSITY OF MINAS GERAIS, Minas Gerais, Brazil *March 2000*
M.S. in Computer Science, Concentration in wireless networks – GPA 4.0/4.0
Thesis title: A new Routing Algorithm for Wireless Ad hoc Networks

FEDERAL UNIVERSITY OF PARANÁ, Paraná, Brazil *December 1998*
B.S. in Computer Science, Concentration in distributed systems – GPA 3.33 /4.0

RESEARCH EXPERIENCE

Network simulation and distributed building, INRIA, Sophia Antipolis, France *October 2011 – Present*
Project leader for the MOBSIM research project. The objective of the project is the development of new techniques for network simulation and the creation of an automatic integration system for open source projects developed in a distributed way. The developed tool handles calls for different version control tools like SVN, Mercurial, GIT, and can handle different build tools like, Make, Autotools, Waf and Python.

Public Safety Networks, EURECOM, Sophia Antipolis, France *April 2010 – September 2011*
Postdoc in wireless communication, focusing methods and techniques for public safety networks and analysis of large datasets issued from network simulations

Ad Hoc and Wireless Mesh Networks, EURECOM, Sophia Antipolis, France *March 2007 – March 2011*
Adaptation of Multicast protocol for LTE (4G) networks. Research on Wireless ad hoc and mesh networks topology control, data dissemination and scheduling algorithms. The research was funded by two European projects and two French research projects focused, in special, Public Safety environments. During this time, apart from the theoretical results, two prototypes were built to verify the viability of the proposed research.

Ad Hoc and Wireless Sensor Networks, Federal University of Minas Gerais, Brazil *March 2003 – February 2007*
Research in Wireless Sensor networks at the SensorNet project. Research on formal verification of routing, QoS and security aspects of wireless ad hoc and sensor networks.

Ad Hoc networks, Federal University of Minas Gerais, Brazil

March 2000 – September 2002

Research in Mobile Ad Hoc networks. Worked in several projects related to Ad Hoc Networks, some of them: formal verification of Ad Hoc routing algorithms, study of parameters for creating more reliable Ad Hoc routing protocols, test and simulation of existent Ad Hoc routing algorithms.

INDUSTRY EXPERIENCE

Fumsoft and MSA companies, Belo Horizonte, Brazil

January 2005 – October 2006

Software Quality Consultant

- Project manager for the MSA test flow project. Organized the test flow and created more useful automated tests. It helped the company to save time and be more agile in detecting errors on their product.
- Created the software specification to track the entire test flow for Fumsoft and participated on the software development. This software represented a huge step in terms of axiomatization of the test process, leading to an economy in terms of time and standardization.

Pontifical Catholic University of Minas Gerais, Belo Horizonte, Minas Gerais, Brazil

January 2005 – December 2005

August 2003 – June 2004

Lecturer

March 2001 – December 2001

- Taught wireless communications, Mathematical fundamentals for Computer Science, Graphs, Algorithms and Programming techniques I and III

Synergia, Belo Horizonte, Brazil

December 2003 – March 2005

Team leader/Senior software engineer

April 2001 – August 2002

- Created the test team at the Synergia Lab. This team represented a huge step on the quality of the developed systems and contributed to attract new clients.
- Manager of the test team, defining goals, and making them available for all the involved, improving the relation among the test team and the other teams.
- J2EE/J2SE Systems development.
- Responsible for the quality assurance inside the development team. Helped to solve problems prior the test phase, what increased the speed of development and test process causing great economy to the company.
- Pre sales contact with clients to define needs and help on the creation of project propositions more adapted to the clients' expectations.

Intelligence Corporation, Brazilian Office, Belo Horizonte, Brazil

February 2000 – April 2001

Software Engineer II

- Developed components in J2SE to be used in high end artificial intelligence systems
- Test definition and implementation of artificial intelligence systems

SKILLS

- Programming and Languages: Java (J2SE, J2EE, J2ME), UML, SQL, ASP, C/C++, Python, Bash
- Software development processes : Unified process, Praxis, TMM, CMM
- Test and development tools: Bugzilla, jMeter, CVS, SVN, Mercurial, Rational suite, Django, Weka
- Network simulators: Sinalgo, NCTUns, ns-2 and ns-3
- Fluent in Portuguese, French and English, good knowledge of Spanish and Italian

AWARDS AND HONORS

- **IEEE/Test Technology Technical Council - E.J. McCluskey**, Test technologies Doctoral Thesis Award, Second place Latin American Semi-Final, 2010
- **Brazilian Computer Society** - Third place at the XIV Brazilian Computer Society Contest on Master's Thesis, Field: Mobile Computing, April 2001
- **Brazilian Computer Society** - Co-advisor of the winner of the XX Brazilian Computer Society Contest on Scientific Initiation Works. Field: Mobile Computing and Formal Verification, April 2001
- **UNESCO (United Nations Educational, Scientific and Cultural Organization)** - Third place at the VII CLEI-UNESCO Contest of Master Thesis, Field: Mobile Computing, September 2000