LEVI LÚCIO

PERSONAL INFORMATION

Born in Portugal, 9 October 1975

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WORK EXPERIENCE

2015– Now Senior Scientist

fortiss GmbH, **Germany** Researcher and Project Manager on the topics of software verification, software certification and variability modelling. I supervise several PhD students on these topics and am building software verification and variability modelling tools in partnership with BMW, Itemis AG, Diehl Aerospace and Rolls-Royce.

2011–2015 Research Associate

McGill University, **Canada** Manager of one of the subprojects of the five-year NECSIS (Network for the Engineering of Complex Software-Intensive Systems for Automotive Systems) project on the application of model-driven development techniques to automotive software development. Developed an original software verification technology (for model transformations). This technology is currently under evaluation by General Motors (US and Canada) and by a model-driven development expert working for Itemis AG (Germany).

2010–2011 Research Associate

University of Luxembourg, Luxembourg

Managed a 3 year project on the model-driven development of reliable resilient systems. The project had as goal the construction of resilient software systems, based on formal techniques. I supervised the project scientifically, technically and administratively.

2009-2010 Post-Doctoral Fellow

Universidade Nova de Lisboa, **Portugal**

Built a model transformation theory based on a restricted model transformation language and developed an associated verification technique. Also, provided scientific direction to the young research group that hosted me.

2003-2009 Ph.D. Candidate and Post-Doctoral Fellow

University of Geneva, Switzerland Performed research on model-driven software testing that led to successfully defending a Ph.D. thesis. Taught undergraduate/graduate courses and supervised several M.Sc. students. Participated in collaborations with multiple industrial partners.

2000-2003 Software Engineer

CERN (European Center for Nuclear Research), Switzerland During the first two years of the contract developed and maintained a software component to store and manage electronic log books for the data acquisition activities of a subatomic particles detector. During the third year of the contract developed software and performed system administration for the data management group of the European Data Grid project.

EDUCATION

2003-2008 University of Geneva, Switzerland

PhD in Computer Science Mention très bien (Distinction)

Thesis: SATEL - A Test Intention Language for Object Oriented Specifications of Reactive Systems

Description: Proposed and built a method and a tool for semi-automatic test case generation for software systems. The method and tool take as inputs a model of the system under test being provided, as well as heuristics for pertinent test selection expressed in domain-specific language for describing the knowledge and expectations of a test engineer.

Advisors: Prof. Didier Buchs

2001-2002 University of Sunderland, England

MSc in Computer Science Distinction (10% best thesis) · Industrial Practice
Thesis: Studies on Online Book-Keeping for the ATLAS Experiment

Description: Participated in the implementation of multiple book-keeping prototypes for the ATLAS (A Toroidal LHC Apparatus) experiment using different database technologies. My work led to the choice of one database technology that was later used when looking for a missing particle in the current theoretical model (the Higgs Boson), discovered a few years later.

Advisors: Prof. Norman Parrington, Dr. Robert Jones (CERN)

ADVANCED TECHNICAL SKILLS

Experienced software modeler and developer.

Software Modelling and Development: Python, Java, C/C++, Prolog, Perl, Eclipse/EMF/ATL/Epsilon, DSLTrans,

AToM³/T-Core/Himesis/Igraph, SVN, Git, Latex

Operating Systems:

LINUX (administrator), MACOS (administrator), WINDOWS (user)

OTHER INFORMATION

Management Skills

Responsible and pro-active project manager, having vast experience in initiating and successfully maintaining inter-institution collaboration and technology transfer between research and industrial environments. Strong technical and research supervisor. Has successfully secured financing for multiple projects, by authoring project proposals and/or project implementation reports.

Event Organization Skills Seasoned conference and workshop organizer, having co-organized 10+ international scientific events.

Communication Skills

Experienced lecturer, frequently gives talks on software verification topics.

Publications

50 scientific publications and 2 programming language books in the popular press.

Languages

Portuguese · Mother tongue

English · proficient (speaking, reading, writing)
French · proficient (speaking, reading, writing)

GERMAN · upper intermediate / advanced (speaking, reading, writing)

Spanish · intermediate level (speaking, reading)

AWARDS

Best Application Paper Award at the International Conference on Model Transformations, edition of 2015, for the paper "Migrating Automotive Product Lines: a Case Study".

REFERENCES

Prof. Dr. Hans Vangheluwe · University of Antwerp, Belgium hv@cs.mcgill.ca · +32 479 85 38 15

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