



Henrique Jung

Curriculum Vitae

Education

2009–2016 **Digital Games**, *Unisinos*, Brazil.

2013–2014 **Computer Science**, *Goldsmiths University*, United Kingdom.
One year sandwich graduation through the Science Without Borders program

Experience

2019–Present **Embedded software developer**, *Knowit*, Sweden.

Working in several projects as a embedded software consultant for Ericsson. I worked mostly in software for the Radio unit product portfolio, with focus on next generation 5G-capable Radio products, including mmWave. My responsibilities include design and review of embedded C++ code that goes into thousands of deployed devices in mobile networks across the world. A big part of this position is test automation, where we maintain a large body of automated tests in multiple levels.
Technologies: C/C++, Embedded Linux, Radio access technologies, LTE, NR, Java

2014–2019 **Embedded software developer**, *CWI Software*, Brazil.

Worked on a team that designs, develops and maintains the Datacom Operating System (DmOS) that is used on Datacom's next generation line of switches and other telecom equipment. DmOS is a modular, fault-tolerant, distributed OS targeting a broad range of embedded devices. My responsibilities also include extensive test automation to guarantee the quality of the final product.
Technologies: C/C++, GNU/Linux, Python, networking protocols

Academic

2012–2013 **Researcher**, *Unisinos*, Brazil.

Worked as a researcher developing an application that uses the Xbox Kinect peripheral to create 3D geometry data from camera input

Computer skills

- Main developing tools: C++, C, Emacs, Python, GNU/Linux, Git, Gerrit, CMake, GCC, clang, Unix command line, SSH, Robot Framework, Jenkins, test-driven development
- Less used but important: Bash, Lua, Java, Visual Studio, Latex, SVN, Swig, Vagrant, Ansible, Emacs Lisp
- APIs: gtest/gmock, boost, protobuf
- Non-technical: agile methodologies

Languages

Portuguese Native
English Fluent

About me

I have a Technology Degree in Digital Games from Universidade do Vale do Rio dos Sinos (Unisinos), and a passion for software development. Between 2013 and 2014, I was part of an one-year exchange student program at Goldsmiths, University of London, studying Computer Science under the Science Without Borders program sponsored by the Brazilian Government. I have been programming since early 2009 using mostly the C and C++ programming languages, but my work and curiosity have brought me to Python and Emacs Lisp. Digital games is the field where I spent most of my graduation days in. The majority of my professional experience is in the field of telecommunications with a special focus on embedded devices. Two other fields of particular academic curiosity are GPGPU and computer security.

For managing coding projects I mostly use Git, including my personal ones. Continuous integration and unit tests are two fundamental tools for developing modern software, so I usually try to bring them to the table in the projects that I am part of. I have professional experience using some test-related tools such as Jenkins, Robot Framework and gtest. I also enjoy doing code reviews, which is both a great way to make better code as a team as well as a learning exercise.

I consider extremely important to be always up to date with the latest technologies and tools that arrive at computing. My aim as a programmer is to design and implement well architected software that will be useful to someone. For these reasons, I spend some of my free time contributing to interesting open-source projects.

Publications

H. N. Jung and V. J. Cassol, *A modular GPU raytracer using OpenCL for non-interactive graphics*, in SBGames 2016, São Paulo, Brazil.