

Daniel Duclos-Cavalcanti

COMPUTER ENGINEER

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Education

TU München

MASTERS OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING

- **Currently Enrolled**

Munich, Germany

Oct 2020 - PRESENT

TU München

BACHELOR OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING

- **GPA**, 3.1 in American Standards
- **GPA**, 2.2 in German Standards
- **Bachelor Thesis**, 1.3 in German Standards — Netlist Error Modeling

Munich, Germany

Feb 2017 - 2020 Sept

PUC-RIO

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

- **144 of 238**, Credits Completed
- **Top 5 Percent** of the Department, GPA: 7.5/10
- **Hochschule Furtwangen University**, Furtwangen, Germany — *Year Abroad 2017*

RJ, Brazil

Jan 2013 - 2017 Jan

Skills and Languages

Code	C (High), C++ (Interm. - High), Lua (High), Go (Low), Haskell (Low), Python, Bash, POSIX Shell, VHDL
Languages	English (Native), German (Fluent), Portuguese (Native), Spanish (Basic)
Tools	Docker, GNU Make, CMake, Git, Linux, Ansible, Jenkins CI, Travis CI, gTest, PyTest
Systems	FreeRTOS, Contiki OS

Experience

Molabo GmbH

WORKING STUDENT - EMBEDDED SOFTWARE ENGINEER

- Development of Unit Tests in C++ through gTest/GoogleTest
- Development of Embedded C-Code for Microcontrollers
- Development of VHDL Modules for FPGAs
- Supervision and development of:
 - the team's CI Pipeline using Jenkins.
 - build Systems and Toolchains written in CMake and Make.
 - containerized test and build systems through Dockers.
 - automating development through scripting languages such as Python and Bash.

Munich, Germany

Oct 2021 - PRESENT

Molabo GmbH

EMBEDDED SOFTWARE ENGINEER

- Summer Internship at Molabo GMBH.
- I was responsible for unit-tests with Google Test, generating code coverage, and toolchain development with CMake of their Embedded Software.

Munich, Germany

Aug 2021 - Sept 2021

TU München

TUTOR - EMBEDDED SYSTEMS PROGRAMMING LAB

- Tutor for the ESPL Lab course within the Electrical Engineering Bachelor at TUM
- Assisted students during their course work and their final project, which consisted of writing FreeRTOS applications in C.

Munich, Germany

April 2021 - Aug 2021

TU München

RESEARCH INTERNSHIP

- Research Intern at the Real-Time Computer Systems Department at TUM.
- Worked with Google's Edge Coral TPU, where I benchmarked its performance on the inference of several Machine Learning Models.
- Automated the training, freezing, inference and Hardware deployment of several ML Models.

Munich, Germany

Oct. 2020 - Feb 2021

TU München

INTERNSHIP

- Research Intern at the Communication Networks Department at TUM.
- I was responsible for testing, debugging and analyzing the behavior of a software switch within a Software-Defined Network environment.

Munich, Germany

Aug. 2019 - Dec. 2019

Projects and Certificates

FreeRTOS Space Invaders

TU München

- Implemented a replica of Space Invaders as a FreeRTOS application.
- The goal was to emulate how multi-threaded applications work on real-time embedded devices..
- The project was written in C.

UCSD: Data Structures Fundamentals

Edx

- Completed the Data Structure Fundamentals course from UCSD's CS MicroMasters program on Edx.

UT Austin: Embedded Systems - Shape the World: Microcontroller I/O

Edx

- Completed the Embedded Systems Introductory Course from UT Austin available on Edx.