# Daniel **Duclos-Cavalcanti**

COMPUTER ENGINEER

📱 (+49) 176 6284-3625  |  ✉ @daniel.duclos.cavalcantigmail.com  |  🏠 ducloscavalcanti.com  |  ⌨ duclos-cavalcanti  |  in daniel-duclos-cavalcanti

## Education

**TU München**                                                    *Munich, Germany*

MASTERS OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING                    *Oct 2020 - PRESENT*

- **Currently Enrolled**

**TU München**                                                    *Munich, Germany*

BACHELOR OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING                    *Feb 2017 - 2020 Sept*

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

**PUC-RIO**                                                            *RJ, Brazil*

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING                                *Jan 2013 - 2017 Jan*

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

## Skills and Languages

| | |
|---|---|
| **Languages** | English **(Native)**, German **(Fluent)**, Portuguese **(Native)**, Spanish |
| **Code** | C, C++, Python, Bash, POSIX Shell, VHDL, Tcl Scripting |
| **Tools** | Docker, GNU Make, CMake, Git, Linux, Ansible, Jenkins CI, Travis CI, gTest, PyTest |
| **OSes** | FreeRTOS, Contiki OS |

## Experience

**Molabo Gmbh**                                                    *Munich, Germany*

WORKING STUDENT - EMBEDDED SOFTWARE ENGINEER                                *Oct 2021 - PRESENT*

- Development of VHDL Modules for FPGAs
- Development of Embedded C-Code for Microcontrollers
- Supervision and development of:
    - the team's CI Pipeline using Jenkins.
    - build Systems and Toolchains written in CMake and Make.
    - unit Tests with gTest.
    - containerized test and build systems through Dockers.

**Molabo Gmbh**                                                    *Munich, Germany*

EMBEDDED SOFTWARE ENGINEER                                                *Aug 2021 - Sept 2021*

- 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.

**TU München**                                                    *Munich, Germany*

TUTOR - EMBEDDED SYSTEMS PROGRAMMING LAB                                    *April 2021 - Aug 2021*

- 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.

**TU München**                                                    *Munich, Germany*

RESEARCH INTERNSHIP                                                        *Oct. 2020 - Feb 2021*

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

**TU München**                                                    *Munich, Germany*

INTERNSHIP                                                                *Aug. 2019 - Dec. 2019*

- 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.

# 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.