# Daniel Duclos-Cavalcanti

COMPUTER ENGINEER, AMERICAN AND BRAZILIAN CITIZEN

📳 (+49) 176 6284-3625 | 💌 @daniel.duclos.cavalcantigmail.com | 😭 ducloscavalcanti.com | 🖸 duclos-cavalcanti | 🛅 daniel-duclos-cavalcanti

#### **Education**

**TU München** 

TU München Munich, Germany

MASTERS OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING

Currently Enrolled

Munich, Germany

BACHELOR OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING

Feb 2017 - 2020 Sept

Oct 2020 - PRESENT

- 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 (UNFINISHED)

Jan 2013 - 2017 Jan

- 144 of 238, Credits Completed
- Hochschule Furtwangen University, Furtwangen, Germany Year Abroad 2017

### 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 Munich, Germany

WORKING STUDENT - EMBEDDED SOFTWARE ENGINEER

Aug 2021 - Jan 2022

- 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.

**TU München** Munich, Germany

TUTOR - EMBEDDED SYSTEMS PROGRAMMING LAB

April 2021 - Aug 2021

· Assisted students during their course work and their final project, which consisted of writing FreeRTOS applications in C.

#### TU München, RCS Department

Munich, Germany

RESEARCH INTERNSHIP

Oct. 2020 - Feb 2021

- Assisted a doctorate candidate on his work with tinyML research.
- 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.

## **Projects and Certificates**

- · FreeRTOS Space Invaders:
  - Implemented a replica of Space Invaders as a FreeRTOS application written in C.
  - Goal was to simulate how multithreaded applications work on embedded devices.
- · UCSD: Data Structures Fundamentals
- UT Austin: Embedded Systems Shape the World: Microcontroller I/O