



Nando Marcel Galliard

Electrical Engineer

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galliard.ga contains all project papers

## Education

### Master of Science ETH Zürich

09/2020 - 03/2023

Electrical Engineering & Information Technology

Major: Embedded systems design and very large systems integration

Minor: Communication networks and machine learning

### Bachelor of Science ETH Zürich

09/2016 - 08/2020

Electrical Engineering & Information Technology

Major: Communication networks and very large systems integration

Minor: Powerelectronics

### Matura

09/2008 - 07/2014

EMS Schiers, Grisons

Major: Mathematics and Physics

Minor: European History

### Corporal - Team Leader Telematics

09/2019 - present

Swiss Military / Civilprotection - Grisons FU GFS Cavalcade 3

## Projects

### Master Thesis

08/2022 - 02/2023

Design & Validation of Power Tracer / Sensor Emulator for Evaluation of Embedded Systems

FPGA based source measurement unit with 6 analog power channels, logic ports and sensor emulation for device under test.

### Semester Thesis #2

03/2022 - 05/2022

Fusion of BLE Direction Finding and UWB Ranging for Indoor Localization

Design and Validation of single anchor localization system by combining BLE angulation and

UWB lateration with Zephyr real-time operating system based firmware.

### Semester Thesis #1

11/2021 - 02/2022

Battery-less always-on smart camera with Sigfox Networks

Design and Validation of On-site energy harvesting with solar panel, face recognition with

Tensorflow C and data transmission with long range wireless access network.

### Satellite Land Use Mapping for Rapid Infrastructure Planning

09/2021 - 12/2021

Automatically mapped complex urban land use patterns from highres satellite images.

### Fictional business proposal on the creation of a big data based guide

02/2021 - 05/2021

Department of Management, Technology, and Economics, ETH Zürich

### Building a mini-Internet

02/2020 - 12/2021

Enabling end-to-end connectivity across 80 Autonomous Systems

Composed of hundreds of network devices, features including Link failure detection, load balancing and traffic control.

## Skills

### PROGRAMMING LANGUAGES

**Experienced:** Python | C

### FRAMEWORKS

**Familiar:** C++ | SystemVerilog | Bash | Powershell | SQL | Matlab

### LIBRARIES

Docker | GIT | CLI | Office | Backend Developer

### EMBEDDED DESIGN

Jupyter | Matplotlib | Numpy | Pandas | Scikit-learn | Tensorflow (Keras)

### LANGUAGES

Altium NEXUS | Zephyr | nRF Connect | STM32 Cube IDE

**Native:** German **Fluent:** English

## Extra

- Teaching assistant for professorship of high power electronics at ETH Zurich over FS 2021
- Salesman for MediaMarkt Chur from 2016 until 2020 as a sidejob
- Tutor for grammar school level math and physics at Fit4School