### **Programming**



# Luca Olivieri **Robotics Engineer**

## **Experience**

2019 - now PhD in Legged Locomotion University of Trento, Trento, Italy

**OS Preference** Unix ★★★★★ Windows ★★★★ MacOS ★★★★★ 2019 **Full Stack Software Developer** 

Deloitte Genoa

Business to Business Internet of Things, both industrial and connected products. Mainly back-end in Java Spring-Boot, building microservices in Cloud Foundry environnement. Front-end with Angular.

2017 **Software Developer**  Mainsim SRL, Genoa, Italy

Full stack web developing, database and system Paid internship. management. One-page application in jQuery, PHP and MySQL. Both

Windows and Unix servers.

### Languages Italian ★★★★

English \*\*\*\* Czech \*\*\*\*

## **Education**

2016 - 2018 Master's Degree in Robotics Engineering University of Genova, Genoa, Italy

Modelling and control of robotic platforms, Machine Learning, Artificial Intelligence, Computer Vision, ROS, POSIX. Real-Time, concurrent and embedded programming. [107/110]

Title and topic of the Thesis: "Hybrid indoor localization for industrial AGVs. Supervisors: Prof. Fulvio Mastrogiovanni, Ing. Marco Lazzarotto.

Development from the ground-up of a segmentation algorithm and an Extended Kalman Filter for an indoor localization system based on a laser scanner sensor. Development in C++ on a Unix environment.

2013 - 2016 Bachelor's Degree in Electronics Engineering and Information University of Genova, Genoa, Italy

**Technology** 

Main subjects: Matematics and Physics, Programming, Control Systems,

Telecommunication Systems, Digital and Analog Electronics. [104/110] Title and topic of the Thesis: "Source Contact Graph Routing on a Nanosat network". Application of a deterministic source routing on a satellite network. Supervisors: Fabio Patrone, Mario Marchese.

Formulation of an a-priori routing algorithm for a satellitar network. C++ with NS3 network simulation package on Unix environment.

2008 - 2013 Scientific Diploma

Liceo Scientifico Marconi, Chiavari, Italy

Scientific Secondary School.

Main subjects: Matematics, Physics, Chemistry, Latin.

## **Key Skills and Interests**

Programming in general is my first interest, constantly challenging myself with new ideas and projects. My programming projects range from high level GUI application like an Android app (Olmaredo Stego) to embedded projects like an OBD2 telemetry interface for cars.

During my internship at Mainsim I had to learn web developing, mainly back-end but a with a touch of front-end too. This new knowledge allowed me to dive into the IoT paradigm with a series of recent projects.

Electronics design is my second interest, preferably digital than analog.

## **Personal Projects**

#### 2018 Front Door Opener

Embedded system connected to the Internet serving a login page. Upon a successful login, the front entrance of the building is opened. This allows guest to enter by themselves or enables owners to simply enter without searching for the key. Complete with an administrator page and logs. Custom-built board.

#### 2018 Boat Tracker

A self-contained embedded system used to log the position of a boat through GPS. Data is sent to a server using GSM/GPRS communication. A comprehensive web page displays the paths logged.

#### 2018 vabbuo.it

A web site that allows users to post random thoughts. The idea is that is then used as a community-fed living wallpaper. Exercise for full-stack web programming.

#### 2017 **Beating Sign**

Home decoration that lights up following the heart rhythm of the user on the previous day. A server retrieves heart rate information from Fitbit server using the OAuth2 protocol. The object is connected trough Wi-Fi and periodically asks for data to the server.

#### 2016 Olmaredo Stego

Free Android application that implements image spread-spectrum steganography. In short it allows the user to embed text messages in photos that can be retrieved trough a password.

#### 2015 **OBD2 Console**

An embedded system connects through bluetooth to an OBD2 adapter present on the car and displays information about the state of the engine on its screens.

## **Other Info**

- Proficient with LATEX, Creo PTC CAD, Simulink and Git
- Tin soldering through-hole and some SMD
- English language PET and First certificates
- · Basic knowledge and interest in digital photography
- · European driving license for cars and bikes
- · Capable clerk in family-run hardware store

## **Disclaimer**

Acconsento alla pubblicazione del mio CV in ottemperanza alle disposizioni di legge dettate in materia di trasparenza (D.Lgs. 33/2013).

December 20th, 2019

Luca Olivieri