Luca Olivieri

Software Developer



- About me -

I like to constantly challenge myself with learning new skills and with personal projects, techrelated or not.

Programming is my first interest, while electronics is the second one, preferably digital than analog.

My core value is respecting my work and the people I work with.

Contact -

olivieri.luca@outlook.com

+39 349 28 99 132

Chiavari (GE), Italy

In LinkedIn

(instagram: @olimexsmart

GitHub: @olimexsmart

Driving License A and B

₩ olimexsmart.it



- Skills



- Languages -

Italian - Native Language

English - Professional Knowledge

Czech - Basic Knowledge

(E) Work

2021-2022

Embedded System Developer

♀ Chiavari

Hi-Lex Italy

Microcontroller C programming for automotive and assembly line applications. Core developer for Jeep Avenger (J516) window lifter project. Development from the ground up of a desktop application in ElectronJS for debugging based on UART. Kicked off Hardware-In-The-Loop testing with Robot Framework (Python). Creation of automated signal generation and testing with MatLab and Simulink. Re-organized Git workflow and setup of an on-premise GitLab instance running on Docker. Assistance in electronic design. Interfacing with MCU supplier on a day-to-day basis.

2020-2021

High School Teacher

♀ Sestri Levante

Natta DeAmbrosis

Programming, Electronics, IT

2019-2020 | PhD in Legged Locomotion

♀ Trento

University of Trento

High performance C++ linear algebra. Optimization techniques. Publications: "Fast and Accurate Multi-Body Simulation with Stiff Viscoelastic Contacts". Teaching assistant in C++ programming courses. PhD interrupted at start of second year.

2019

Full Stack Web Developer

♀ Genoa

Deloitte

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

2017

Backend Developer

♀ Chiavari

Mainsim

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

Education

2016-2018

Master's Robotics Engineering

♀ Genoa

University of Genoa

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

Thesis: "Hybrid indoor localization for industrial AGVs".

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 $\mathsf{C}++$ in a Unix environment.

2016-2018

Bachelor's Electronics Engineering and Information Technology Genoa Genoa

University of Genoa

Programming, Control Systems, Telecommunication Systems, Digital and Analog Electronics.

Thesis: "Source Contact Graph Routing on a Nanosat network". Formulation of an a-priori routing algorithm for a satellite network. C++ with NS3 network simulation package on Unix environment.

Flutter Go Qt Embedded Linux Computer Vision Machine Learning Docker Power Electronics Renewables Advanced Networking Other Interests

- Photography
- Furniture DIY
- 3D printing
- Motor Bikes
- Soldering
- Contemporary History
- Teaching

P Personal Projects

dumbPOS

Most local culinary events have the need of a low cost and simple POS system.

I'm currently building a solution based on an off-the-shelve receipt printer, a Flask (Python) backend and Flutter frontend.

Proselide a startup

I challenged my self to launch an idea and start a business. The problem I was trying to find a solution for was the monitoring of parking spaces, to avoid the pollution, traffic and general stress associated with looking for a parking spot.

From a technical point of view, the idea was based around a low cost camera sensor and computer vision.

Self 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. Home-built board.

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 on a map.

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.

Olmaredo Stego

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. (Currently unavailable on Play Store)

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.