

## SUMMARY

Electronics engineer specialized in embedded devices is seeking opportunities in computer vision, artificial intelligence and robotics. Interested in developing the technologies that are going to improve our quality of life and have an impact in our society.

Results oriented, eager to learn, with experience in the corporate world and also with experience working in international environments.

*"Optimized code is important, but readable and maintainable most of the time is enough."*

## WORK EXPERIENCE

### COMPUTER VISION DEVELOPER | Ago 2017 – Oct 2018 | Vigo (Spain)

- Development and fine-tuning of object detection pipelines for embedded devices (**Jetson boards**) deployment based on Deep Learning (**Caffe** and **Tensorflow**).
- Research and implementation of pipelines focusing in fast inference (**Intel Movidius**, **TensorRT**, **TF Lite**).
- Traditional computer vision module development with **OpenCV** and **C++**.
- Development of an semi-automated development and testing suite for deep learning models to decrease the time between experiments.



**XESOL** innovation

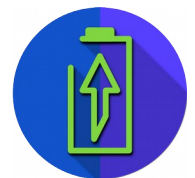
### JUNIOR CONSULTANT | Feb 2016 – Feb 2017 | Valencia (Spain)

- Development of new releases for the Valencian Health Department. The framework used was based on **Spring**, **Hibernate**, **ExtJS** and **Oracle RDBMS**.
- Migration from **JSP** and **Struts** to **Spring**, **Hibernate** and **ExtJS** stack.
- Development of new releases in different apps for the University of Valencia using: **JSP**, **Struts** and **Oracle RDBMS**.



### DEVELOPER & CO-FOUNDER | Sep 2015 – Feb 2016 | Valencia (Spain)

- I was part of the founding team in Uplite. I developed a technology that allowed sharing energy between smartphones with our proprietary cable. (**C**, **CORTEX-M4**)
- Development of a middle-man that showed ads in the phone that was charging as a monetization objective.
- Development of an Android app to show our user base the location of the people with a Uplite device around them.



### TRAINEE | Oct 2014 – Feb 2015 | Gdansk (Poland)

- Sales team support from the technical point of view.
- Development of an audiovisual guide for the **iModCloud** software new customers.
- **iModCloud/NxDynamics** presentations to potential customers.



## EDUCATION

### Oct 2018 – Dec 2018 | SCHOOL OF ARTIFICIAL INTELLIGENCE SCHOLARSHIP

Received a two-months full scholarship to participate at the School of Artificial Intelligence of Pi School. Selected among some of the brightest Engineers in the field, as a scholarship winner, I worked on a project presented by a real client, developing AI-based business solutions.

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## Feb 2017 – Mar 2018 | **SELF-DRIVING CAR NANODEGREE**

The program contains the next topics:

Computer vision, deep learning, machine learning, sensor fusion, localization, control systems and path planning.

It is focused on developing the necessary understanding and technical skills to create an autonomous vehicle able to drive safely in public roads.

## 2010-2014 | **BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATION ENGINEERING**

*Specialty in embedded system and Real-Time computing.* Universitat Politècnica de València. (Spain)

Final thesis (**A grade**): Development of a cross-platform Qt application for the control of liquid's tank. QML, C++

## 2014 SPRING SEMESTER | **ERASMUS SCHOLARSHIP**

Faculty of Electrical Engineering. České vysoké učení technické v Praze. Prague (Czech Republic)

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### PROJECTS

- Telegram bot to detect and classify fish species from photos (under development). Telegram API, Python, Tensorflow.
- Autonomous maritime drone (under development). Raspberry Pi, C++, Python, Qt, QML, 3D modeling & printing.
- Vehicle detection & tracking with OpenCV and deep learning approaches. Python, OpenCV, Keras, Machine learning.
- Lane detection in the road using computer vision techniques. Python, OpenCV.
- Traffic sign identification and classification. Python, Tensorflow, OpenCV.
- Uplite: Sharing energy device between smartphones. C, USB protocol, Cortex-M4.

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### SKILLS

*Languages:* Spanish: Native | English: Intermediate-high

*OS:* Development - Ubuntu 16.10

*Programming languages:* C++, Python, QML, Java and JavaScript.

*Control version:* Git, SVN, and CVS.

*PCB board design:* KiCad.

*3D Design:* Autodesk Inventor, Cura 2.

*Embedded platforms:* Jetson Board TX2, Raspberry Pi, STM32F4 (Cortex-M4), FRDM-K64 (Cortex-M4) and Arduino.

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