

EDUCATION

- **University of Alicante**

Bachelor of Robotics Engineering — (Current grade: 9.15/10)

Alicante, Spain

Sep. 2017 – Present

EXPERIENCE

- **QuixMind**

Internship

Alicante, Spain

July 2019 – Present

- **ROS Robot Simulation:** modeled a robot forklift and its environment, simulated using Gazebo.
- **Sensors:** took measurements from perception sensors (LIDAR, Intel RealSense) and processed them in order to perform control tasks.
- **Communications:** connected the ROS application to a Windows app through TCP/IP, using compression to accelerate the transmission rate.
- **Docker:** containerized ROS environment so it can be run anywhere.

COURSES AND TRAINING

- **Udacity**

Intro to Deep Learning with Pytorch

July 2019

- **Coursera**

Machine Learning

June 2019

- **University of Alicante**

CUDA/C++ Workshop

March 2019 – April 2019

SKILLS

- **Languages:** C, C++, Python, MATLAB/Octave, Rust
- **Tools:** ROS, Modern OpenGL, SDL, PyTorch, L^AT_EX
- **Linux:** Bash, GDB, GNU Make, Vim, Tmux, Git, SSH, basic sysadmin skills
- **CAD:** KiCAD, Autodesk Inventor, Autodesk FUSION 360
- **Embedded Systems:** AVR, STM32, FreeRTOS, libopenm3
- **Machine Learning:** Deep Learning, Reinforcement Learning
- **Other :** 3D printing, soldering

LANGUAGES

- **Spanish:** Native
- **English:** Fluent (B2)

PROJECTS

- **Image Captioning:** implementation in Pytorch of the paper CNN+CNN: Convolutional decoders for Image Captioning
- **DDQN:** implementation of Double Dueling DQN in Pytorch, trained in Breakout OpenAI environment
- **3D Cellular Automata:** A 3D version of Game of Life using C++ & OpenGL.
- **Bluetooth-controlled 3-stage coil gun tank:** powered by an AVR MCU and controlled through an Android App.
- **Scientific Calculator:** designed from scratch, powered by an ARM Cortex M0 MCU using MBED.

CONFERENCES

- **II International Conference of Artificial Intelligence of Alicante** Alicante, Spain
November 2019
- **ICIAM 2019** Valencia, Spain
Volunteer
July 2019
- **SWYP 2019** Alicante, Spain
April 2019
- **IROS 2018** Madrid, Spain
Volunteer at IEEE stand
October 2018
- **Young Professionals in SPACE** Barcelona, Spain
July 2018

MISCELLANEOUS

- **GitHub:** <https://github.com/noctrog>
- **LinkedIn:** Link