

Yago Lizarribar Carrillo

Data Scientist/Project Manager - yagolzcr@gmail.com



I am a Data Scientist and Scientific Project Manager in the CyberData Technologies Group inside the Cyber-Defence (CYD) Campus, armasuisse W+T. I have worked in various fields of engineering, starting from Teleoperated Robotics, Autonomous Vehicles and Swarm Robotics. Now my focus lays on applied Machine Learning to physiology to detect health conditions, as well as DL algorithms for time series processing.

EXPERIENCE

Data Scientist/Scientific Project Manager, CYD Campus, armasuisse W+T; Thun, Switzerland – January 2024 - (Cont)

- Development of a platform to monitor soldier training and prediction of heat collapse. We use different anomaly detection models to detect deviations from normal patterns and alert their supervisors
- Development of the whole infrastructure to store, process and visualize the health data from soldiers.
- Research on Deep-Learning based compression methods for time series signals for more efficient storage.

PhD Student, IMDEA Networks; Madrid, Spain – June 2019 - December 2023

- Research on localization systems with low-cost crowdsourced spectrum sensing networks. Self-localization of low-cost sensors with aircraft signals. Localization on 5G networks with OpenAirInterface. Development of the sensors of the Electrosense Network.
- Internships at armasuisse W+T within Cyber-Defence Campus in 2020 and 2022 (3 months each)

Research Assistant, MIT Media Lab; Cambridge, US – September 2017 - December 2018

- Worked on Autonomous lightweight vehicles, developing SLAM techniques, Computer Vision applications (obstacle identification) and Human-Machine Interactions. Research on Swarm Robotics and its applications to city management.

J.L. Engineering S.L, San Sebastian, Spain – Jun 2016 - Aug 2016 & Jun 2017 - Aug 2017

- Development of industrial facilities, ranging from CAD design of buildings, environmental impact assessment and design of low-voltage electrical networks (20-1000 V)

German Aerospace Center (DLR), Munich, Germany – June 2015 - August 2015

- Research on Haptic device comparison in teleoperated force-feedback systems. Implementation of Machine-Learning methods to correlate electromyographic signals to exerted arm force.

EDUCATION

University of Carlos III, Madrid – PhD in Telematics Engineering, 2020-2025

- PhD obtained in the area of crowdsourced spectrum networks. Suma Cum Laude

University of Carlos III, Madrid – MSc in Telematics Engineering, 2019-2020

- Coursework CS and Telecom applied to Computer Networking. Graduated with Honours.

University of Navarra, San Sebastian - MSc in Engineering Technologies, 2016-2018

- Continuation of BSc. Graduated with Honours.

University of Navarra, San Sebastian - BSc in Engineering Technologies, 2012-2016

- Coursework on Mechanical, Electrical and Electronics Engineering. Graduated with Honours.

SKILLS

- **Languages:** Spanish (Native), Basque (Native), English (C2), German (B2), French (A2).
- **Programming:** Python, MATLAB, C++, Java, Rust, Javascript, HTML/CSS.

- **Frameworks:** SDR Stack (Soapy, UHD, RTL-SDR), Flask/FastAPI, PyTorch, Tensorflow, React, OpenCV, ROS.
- **Sysadmin:** Linux (Debian & RedHat-based distributions), MacOS, Docker, PostgreSQL.
- **Teaching:** University Lectures (Computer Networks) from 2021 to 2023.

AWARDS

- **NATIONAL EXCELLENCE AWARD**, Spanish Government (2020) — 3rd place nationally in Engineering
- **CITY ROBOTICS HACKATHON**, MIT Media Lab (2018) — 1/30 place
- **ACADEMIC EXCELLENCE AWARD**, Santander Bank (2017)