

Víctor Escribano García – CV

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Web page: victorescribano.com

Education

UPC (Polytechnic University of Catalonia)

Master in Robotics and Automatic Control

Sept. 2022 – Jun. 2025

UPC (Polytechnic University of Catalonia)

Engineer in Automatic Control and Electronics

Sept. 2018 – Jun. 2022

- Mention with honors at my final thesis project related to the application of inverse perspective mapping on an autonomous Formula Student vehicle. (Tools: Python, C++, ROS1, YOLO)
- Overall grade of 7.5 over 10 on my bachelor's degree.

Professional Experience

Escribano Mechanical & Engineering (EM&E)

AI Engineer — Barcelona

Jun. 2025 – Currently

- Built a real-time "follow-me" person-following system for autonomous robotic platforms, detecting, tracking and re-identifying people on a CPU-only embedded device, fusing LiDAR and camera and processing point clouds in real time. (Tools: Python, PyTorch, OpenVINO, object tracking & Re-ID)
- Designing new deep learning models such as hyperbolic foveation imaging to detect small objects, focusing high-resolution sampling on the region of interest while cutting peripheral compute.
- Deploying and optimizing deep learning inference on embedded edge hardware for low-latency on-device perception. (Tools: OpenVINO, ROS2, C++)

Earth Rover

Robotics Perception Engineer

Feb. 2024 – Jun. 2025

- Developing perception systems for autonomous navigation in ground-based agricultural robots. (Tools: C++, ROS, Gazebo, Point-cloud libraries)
- Enhancing computer vision models using synthetic data and generative AI-based augmentations. (Tools: Blender, YOLO, Stable Diffusion)

Bertrandt

QA Automation Engineer

Feb. 2023 – Jan. 2024

- Developed Python automation code for protocol trace analysis and validation with SCRUM methodology. (Tools: Selenium, FastAPI, PyAutoGUI, OpenCV, ODIS, IDEX, CP-Tool, CANoe, VW-Tools, KMP)
- Designed Test Catalogs from client requirement specifications.

Canary Islands Institute of Astrophysics (IAC)

SW Engineer Scholarship

Jul. 2022 – Oct. 2024

- Optimized the telescope image ratio for satellite observation by developing a hardware-agnostic pointing estimator system to minimize the waiting times for ephemerides, developed in Python and accelerated by Numba.
- Collaborated with the Military Defense detecting and tracking satellites and space debris, improving space surveillance operations through predictive algorithms.
- Upgraded the IAC80 and TCS telescope control systems, enhancing the graphical interface with PyQt and the ROS1 framework for real-time visualization of RA/DEC errors of the pointing system.

Alisys Robotics

Internship as Robotics Specialist

Sept. 2021 – Jan. 2022

- Development of real-time face recognition systems for applications in mobile and medical robots. (Tools: OpenCV, ROS1, Tkinter, Flask)
- Theoretical study and documentation of an omni-transportation platform for medical robots. (Matlab)

Portfolio

Blender Synthetic Image Dataset

Synthetic crack detection dataset.

April 2024

- Realistic and procedural crack images on concrete pipes with automatic segmentation labels.
- Trained on YOLOv10 segmentation and tested on real images with great results on challenging scenarios.

HackUPC

Overall winners of HackUPC 2023

March 2023

- Developed VR and state-of-the-art computer vision solutions in real estate in less than 36h.
- Made use of Segment Anything Model from META, restb.ai API and Stable Diffusion to remodel house interiors.

ecoRacing – Formula Student

Driverless Perception Engineer

Jan. 2020 – Sept. 2022

- Second best autonomous racing car in Spain 2020.
- Design and development of perception systems for the first autonomous racing vehicle of UPC ecoRacing.
- Developed camera calibration solutions.
- Implemented mono & stereo computer vision systems and object classification in real time. (CMOS, Intel-Realsense)
- Developed annotation tools for regression neural networks.
- Designed sensor fusion systems with camera + LiDAR. (Velodyne VLP16, SICK MR6000)
- Tools: Python, C++, ROS1, OpenCV, YOLO, CUDA, TensorRT, Roboflow dataset management, Halcon, Jetson AGX.

Technical skills

- **Spoken Languages:** Spanish (native) · Catalan (native) · English (B2 - Professional)
- **Programming languages:** Python · C++ · MATLAB
- **Frameworks, tools & O.S.:** ROS1 & ROS2 · PyTorch · TensorFlow · OpenVINO · TensorRT · GIT version control · 3D printing · Linux
- **Personal:** Strong analytical problem-solving skills. Interest in Computer Vision and Automation.
- **Portfolio webpage:** victorescribano.com