## **Iesus Davila**

### Mechatronics Engineer

CONTACT

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# PROFESSIONAL EXPERIENCE

#### Robotics and Al Engineer | February 2025 - Present

**CEDIA** 

- Development of a half-body humanoid for patient care in hospitals.
- Development of Artificial Vision, LLM and trajectory planning algorithms for the execution of functionalities.
- Implementation of emotion-based conversational assistance in embedded devices.

#### Digital Factory Intern | August 2024 - January 2025

Unilever

- Development of Machine Learning algorithms for process prediction in product manufacturing.
- Planning of robotics and computer vision projects.
- Design and execution of applications to automate internal records.

#### Software Developer for UGV | February 2024 - May 2024

SUNY (South Korea - Incheon)

- Development of a tracking robot using only a 2D LIDAR sensor, with speed control for precise object tracking.
- Migration of a robot from ROS1 to ROS2, ensuring an efficient and smooth transition.
- Consulting on robotics issues, providing technical support and recommendations on robotic systems.

#### Robotics Software Developer | April 2023 - September 2024

**RAMEL** 

- Design, coordination and development of robotics projects using ROS (ROS1 and ROS2).
- Development of a multirobot algorithm based on master-slave methodologies using ROS2 Humble.
- Implementation of a software architecture for ROV testing, aimed at the validation of underwater systems.

LANGUAGES

English - Advanced

Spanish - Native

**SKILLS** 

Robot Operating System (ROS) Computer Vision

Nav2 OpenCV

Movelt2 MediaPipe
Gazebo TensorFlow

Multi Robot Keras

**EDUCATION** 

Escuela Superior Politecnica del Litoral | 2019-2024

Mechatronics Engineering

**INVESTIGATION** 

Software Architecture and Simulation Interface for Autonomous Underwater Vehicles

Paper presented at IEEE

OFFICIAL AWARDS

Software Architecture and Simulation Interface for Autonomous Underwater Vehicles

Best paper - IEEE ETCM 2024 - Track Robotics & Automation