FERNANDO VELA HIDALGO

Research Technician | Master in Robotics and Automation

in https://www.linkedin.com/in/fernandovh/

INTRODUCTION

Robotics engineer with experience in research and development of autonomous systems. Currently working in a research laboratory, specializing in hardware and software for autonomous vehicles, including ROS, sensor calibration, sensor synchronization, and perception.

Passionate about connecting R&D with real applications and solving technical challenges in the field. Seeking high impact international opportunities in robotics, field support and continuous improvement. Certified drone pilot, with strong interest in robotics.

WORKING EXPERIENCE

- **Research Technician - Development of Technologies for Autonomous Vehicles**
  2023 – Present **Autonomous Mobility and Perception Lab (AMPL) - UC3M**
  Development of Technologies for Autonomous Vehicles.

- **Recruitment Technician (INTERSHIP)**
  2022 –2023 **Serveo**
  Facility Management, Energy Efficiency and Technology Projects

- **STEM teacher**
  2020 –2022 **The Creative Minds Education**
  Robotics, Programming and 3D Design teacher.

- **Private tutoring teacher**
  2018 – 2021 **Tusclasesparticulares**

VOLUNTEERING

2019 Fundación Telefónica: Volunteering with drones and robotics.

2018 Aula Medioambiental de Boadilla del Monte

ACHIEVEMENTS

2025 Final Master Thesis: Vehicle Immersion System

2023 Final Degree Thesis: Design and development of a miniature autonomous vehicle

2019 Bachelor of Excellence Research: CRIPTOMONEDAS -Dificultad y Minado

2019 First place in the ASTI Robotics Competition III edition

2019 Young Researchers at Complutense University

2017 – 2019 Spring Math Contest

OTHER INTERESTS

PROGRAMMING, MUSIC PRODUCTION, VIDEO PRODUCTION, PIANO AND COMPOSITION, 3D PRINTING, E-LEARNING, SPORTS, PYTHON, DRONES, ANDROID, TRAVEL, ARTIFICIAL INTELLIGENCE

ACADEMIC EDUCATION

2023 – 2025 Master's Degree in Robotics and Automation

Carlos III University of Madrid (UC3M)

2019 – 2023 Industrial Electronics and Automation Engineering, Bilingual Program

Carlos III University of Madrid (UC3M)

2017 – 2019 Bachelor of Excellence

I.E.S. Arquitecto Ventura Rodríguez

COMPLEMENTARY EDUCATION

2023 MATLAB Certifications

2022 Scientific Computing with Python

2021 Radio Operator

2021 UAS Operator

2021 Drone Pilot A1/A3 - A2 - STS

2020 Construction 4.00

2020 Cybersecurity in Teleworking

2020 Growth Hacking

2020 Taekwondo

2020 Mobile App Development

2020 Web Development: HTML and CSS

2019 Leisure and free time instructor

2019 Piano and musical language

2018 Video games in Unity

2018 Music production

2017 Creator and designer of successful mobile applications

2017 Website designer in WordPress

2017 German: Intermediate Level

Driver's license (Class B)

LANGUAGES

English - Advanced
German - Beginner
Spanish - Native

SKILLS

PYTHON, PYTORCH, OPENCV, C, C++, C#, JAVA, ARDUINO, MATLAB, MATLAB SIMULINK, BLENDER, UNITY, HTML, CSS, WORDPRESS, SOLID EDGE, PHOTOSHOP, AFTER EFFECTS, EXCEL, WORD, ROBOTSTUDIO, LTSPICE, MULTISIM, PSIM, LABVIEW, ROS, ROS 2, FL STUDIO, LINUX, GRAFANA, RASPBERRY, DOCKER