

## JAVIER FERNANDEZ

IOT & MECHATRONICS ENGINEER SPECIALIZED IN EMBEDDED DEVELOPMENT AND INDUSTRY 4.0

- Management skills
- · Quick learning
- Teamwork
- Creativity

#### **CONTACT ME**

- Rennes, France
- 06 65 64 26 80
- javier-alejandro.fernandez @imt-atlantique.fr
- in in/javier-fddz
- /alex-fddz

#### **TECH SKILLS**

 $\begin{array}{l} \mathsf{PYTHON} \cdot \mathsf{C/C++} \cdot \mathsf{SQL} \cdot \mathsf{LINUX} \cdot \\ \mathsf{UI/UX} \cdot \mathsf{SOLIDWORKS} \cdot \mathsf{SCRUM} \cdot \mathsf{GIT} \cdot \mathsf{3D} \ \mathsf{PRNT} \cdot \mathsf{PCB} \cdot \mathsf{MATLAB} \end{array}$ 

#### LANGUAGES

English

Spanish

French

Romanian

German

#### **HOBBIES**

HIKING · PHOTOGRAPHY · READING · YOGA · COOKING · MUSIC · CALISTHENICS · DIY

#### **WORK EXPERIENCE**

#### **R&D Engineer**

**IMT** Atlantique

Feb 2024 - Present

France

- Laboratory focused on accelerating SCHC development.
- → Open source publication and integration projects.
- ✓ New feature implementation and standardization collab.; raised awareness among industrials and academics.
- C/C++, Python, STM32, LoRaWAN, 4G/5G, SCHC.

#### **Consulting Engineer**

May 2021 - Jan 2023

Freelance

Colombia

- Improvement opportunity for data acquisition project.
- ► Interface redesign, code optimization & technical support.
- ✓ Boosted solution performance and improved data fidelity.
- Ignition 8, Python, UX/UI analysis and design.

#### **Mechatronics Engineer**

May 2021 - Feb 2022

**BANGRoute** 

Romania

- Innovative guidance system for urban bicycle commuting.
- **►** Embedded development and solution prototyping.
- ✓ Final working prototype ready for fund-raiser launch.
- \* ESP32, nRF52840, Zephyr RTOS, BLE, 3D printing.

#### **Project Engineer**

Sep 2019 - May 2021

**ECON Tech Automation** 

Mexico

- Systems integrator in automation for Industry 4.0 growth.
- → Automation project development across mutiple sectors.
- ✓ Digital transformation; Ignition 8 Gold Certification.
- 🔭 Ignition 8, TIA Portal, Solidworks, industrial-grade equip.

### **EDUCATION**

# MSc in Architecture and Engineering for IoT

Feb 2022 - Dec 2023

**IMT** Atlantique

France

- Followed courses: Networks and Communications for IoT, Cryptography, AI for Embedded Systems, 4G/5G.
- Research project for IoT communications and security in collaboration with Universidad de Murcia.
- Internship: Work on UWB and BLE communications Performance (STMicroelectronics).

#### **Mechatronics Engineering**

Aug 2013 - Jul 2019

Universidad Autónoma de Nuevo León

Mexico

- Followed courses: Analog and Digital Electronics, Sensors and Actuators, Embedded Systems, Automation.
- Intelligent Machines specialization.
- Internship: New Product Introduction Engineer Intern (3M).

### Mechanical & Automation Eng. Sep 2017 - May 2018

**INSA** Rennes

France

• International exchange: Environment | R&D projects collab.