

# Florian Wellmeyer

Robotics, Embedded Systems Engineer



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- 🔗 Portfolio Website please click here
- ☎ +33 6 15 68 54 08
- 🌐 Profile
- 🗣 French - German

## PROFILE

Seeking an engineering role in robotics or embedded systems, bringing hands-on experience in the field and a strong interest in autonomous technologies and marine systems.

## SKILLS

### Programming Languages

- Python
- C/C++
- C#
- Java
- SQL
- Assembly
- MPEG
- URScript

### Software

- ROS
- RIVZ
- RQT
- Linux
- RTDE (Real Time Data Exchange)
- Unity
- RobotStudio (ABB)
- STM32CubeIDE
- Arduino
- LT Spice
- CANape / CANoe / ODIS
- Artifactory
- Unity Pro
- Catia / SolidWorks / Fusion 360

## LANGUAGES

**English** — B2 Level, TOEIC

**French** — Fluent

**German** — B1 Level

**Arabic (Lebanese)** — Starting

## PROFESSIONAL EXPERIENCE

### INTERDIGITAL R&D, HAPTIC ENGINEER INTERNSHIP

04/2025 – 09/2025 | RENNES, FRANCE

Development of demonstrators and tools showcasing InterDigital's haptic encoding solutions.

- Implemented control systems for a Universal Robot arm (UR3e), interfaced with a Geomagic Touch device.
- Explored and tested various haptic standards, including the MPEG haptic format.
- Collaborated with researchers to enhance VR experiences and haptic encoding techniques.
- Contributed to system integration and communication via TCP/Ethernet.

**Skills:** robotics, Python, C#, C++, TCP/Ethernet communication, MPEG haptics, UR3e, RTDE, Polyscope.

### TECHNOLOGY AND STRATEGY (T&S) BOSCH, ASSISTANT ENGINEER INTERNSHIP

03/2024 – 07/2024 | STUTTGART, GERMANY

Support for the validation of Bosch's parking assistance systems for the Volkswagen Group (VW, Audi, Skoda, Cupra).

- Performed real-world tests to evaluate the performance and compliance of ADAS (Advanced Driver Assistance Systems).
- Analyzed test data and proposed improvements to enhance system reliability.
- Contributed to the development and automation of test procedures for future validation of automated parking systems.

**Skills:** CANape, ODIS, CAN bus communication, verification & validation processes.

## EDUCATION

### NATIONALE ENGINEERING SCHOOL OF BREST (ENIB), ENGINEER DIPLOMA

2025 | (Academical Erasmus semester at University of Stavanger, Norway 2023)

- Virtual Reality Course - Haptic technologies, Presence, and Immersion in VR
- Modelling in Robotics and Autonomous Mobile Robotics Course
- Embedded systems

### UNIVERSITY OF BRETAGNE OCCIDENTALE,

MBA DIPLOMA - MASTER OF BUSINESS AND ADMINISTRATION

2025

### JOSEPH VALLOT HIGH SCHOOL, BACHELOR'S DEGREE

2020

## Projects - For more details, please visit my portfolio website.

### Mobile Robot – ROS2

Development of an autonomous robot with manual, random, and color-tracking modes. Motor control, sensor management, and LCD handled via STM32; image processing and Wi-Fi interface a PC-based HMI.

**Skills:** STM32, RTOS, ROS2, Raspberry Pi, OpenCV, UART, Wi-Fi, HMI.

### Sensor Network

Design of a multi-sensor system interconnected via CAN bus. Physical measurements collected by multiple STM32 boards and transmitted to a host PC using CAN frames.

**Skills:** STM32, CAN bus, I2C.

### Pick-and-Place System – ABB Robot

Developed a pick-and-place application using an ABB robot. Integrated object detection with Python and OpenCV, and programmed the robot's movements in RobotStudio for automated task execution.

**Skills:** RobotStudio, Python, OpenCV.

### Underwater Sound Classification – In collaboration with ReefPulse

Developed a machine learning pipeline to classify marine species based on reef audio recordings. Processed and analyzed .wav files to extract features and train AI models for species identification.

**Skills:** Machine Learning, Audio Processing, AI Models, WAV File Analysis.

### Portfolio Website [🔗](#)

[https://florianwellme.github.io/Portfolio\\_Florian\\_Wellmeyer/](https://florianwellme.github.io/Portfolio_Florian_Wellmeyer/) [🔗](#)