ERWAN MARTIN

ROBOTICS RESEARCH ENGINEER

REFERENCES :

📞 **: +33 6 95 92 68 30**

✉ **: erwan.martin@univ-lille.fr**

 : https://github.com/R1leMargoulin

 : https://www.linkedin.com/in/erwan-martin-76b931199/

SKILLS

PROGRAMMING

- **C/C++/C#**
- **Python**
- **WEB : HTML/CSS/PHP/JS**

ROBOTICS

- **ROS/ROS2**
- **Electronics/Mechanical basics**
- **Scheduling**

AI

- **Machine learning (sklearn)**
- **Deep Learning (Tensorflow, Pytorch)**
- **Deep Reinforcement Learning**

OTHER

- **Multi-Agent Systems**
- **OPC UA**
- **MQTT**
- **UML/SysML**
- **Databases(SQL/NoSQL)**
- **Networking**

LANGUAGES

- **French : Native Language**
- **English : C1 (TOEIC 960/990)**

SOFT SKILLS

-**Adaptability**
-**Team Working**
-**Autonomous**

PROFESSIONAL EXPERIENCES:

2024-2027 : PHD THESIS AT CRISTAL LABORATORY
3 years
Intelligent and adaptive collective behavior for a fleet of aero-terrestrial robots.

2023 : UNIVERSITY OF LOUISIANA AT LAFAYETTE, USA - ROBOTICS RESEARCH INTERNSHIP
3.5 Months

- Bringing an omni-directional robot to ROS2, implementing imu sensor, control and made a Gazebo simulation for the robot.
- Worked with a raven II surgery robot, implementing cameras, sensors and made an interface in order to have a realtime view for the surgeon

2021-2024 : CESI, FRANCE - ROBOTICS RESEARCH ENGINEER (APPRENTICESHIP FOR COMPUTER SCIENCES ENGINEERING DEGREE)
3 years

- Multi kind robot scheduling with:
   - **OPC-UA** protocol, **PTZ cameras (hikvision**) for perception,
   - **Boston Dynamics: SPOT**, **MIR100**, **Tiago++**, Universal Robots (**UR5/10**)
- ROS/ROS2 resources consumption benchmark with an **Open Manipulator X** robot.
- DEFI&CO project: 6 **Niryo NED** Programmation, coordination, networking in order to make a production line.

2021: CESI, FRANCE - ROBOTICS RESEARCH INTERNSHIP
4 Months

with those robots:
   -**Turtlebot - Waffle pi**
   -**Robotnik - Summit XL**
The aim was to make the robots autonomous, connected to the same database, and coordinate them in a second step

2016: UBISOFT, FRANCE - OBSERVATION INTERNSHIP
1 Week

EDUCATION:

CRISTAL|UNIVERSITY OF LILLE - PHD COURSE
2024 - 2027 ->Intelligent and adaptive collective behavior for a fleet of aero-terrestrial robots.

CESI - ENGINEERING SCHOOL
2019 - 2024 -> Computer Sciences Engineering Degree
-Sandwich course during 3years (2021-2024)
Software Development | Networking | Web development | on-board electronics | Data/Big data | Engineering | AI | Project management

LYCÉE GUILLAUME LE CONQUÉRANT, LILLEBONNE
2019 -> Baccalauréat S
- "Mention bien" - Latin option

HOBBIES:

SPORTS
Badminton (10 Years) | Kenjutsu (5 years) | Diabolo (self-learning) | Swimming (4years) | Soccer(3years) | Longboard self-learning (recently)
CESI EXPERIMANTAL ROBOTICS'S PRESIDENT
President of a student association that is making robots and electronics (Instagram: @cesi_experimental-robotics)

MUSIC
Listening | Guitare (4years)