R U B L É   L o u i s

Seeking a 6-month internship as a Robotics & Perception Software Engineer

22 yo | Paris, France | ✉ louis.ruble@etu.utc.fr

 <u>lsruble</u> | <u>Louis Ruble</u> | Personal Website

E D U C A T I O N

Engineering Degree in Computer Science

2022-2025

Université de Technologie de Compiègne, France | Specilization in Intelligent Systems and Robotics
Exchange semester in Zaragoza, Spain | Master of Robotics, Graphics and Computer Vision
Relevant courses : Computer Vision, Autonomous Robots, Machine Learning, Algorithms and Data structures, OOP

University diploma in Electrical Engineering and Industrial Computing

2020-2022

IUT de Cachan, France | Specilization in Real-Time Computing and Embedded Networks
Relevant courses : Signal Processing, Embedded Systems, Electronics, Control Systems

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W O R K   E X P E R I E N C E

Human-Robot Interactions Engineering Intern

Enchanted Tools - Paris | Sep 2023 - Feb 2024
Gained in-depth knowledge of the **robotics stack**, including deployment and workflow management. Developed a platform using facial landmarks, ASR and Speech Source Localization (SSL) in Python to enhance **active speaker detection.** Programmed and integrated new natural **character behaviors** into the robot using Godot, C++.

Research Assistant in Computational Imaging

Laboratoire Signaux & Systèmes - Gif sur Yvette | May 2022 - Aug 2022
Imported an **image reconstruction algorithm** from MATLAB to Python to **improve performance**. Implemented wavelet transforms, gradient functions, and convolution operations in Python. Debugged and optimized the code translation process.

A C A D E M I C   P R O J E C T S

Emotion Recognition in VR Environment
Developed an **AR algorithm** simulating VR headsets on faces. Created an **emotion recognition** dataset and Implemented a **deep learning model** with TensorFlow for VR users.

Traffic Sign Recognition
Developed an effective road sign detection system using MSER and **HOG-SVM,** achieving 95% accuracy with near **real-time processing** on low-power hardware.

S K I L L S

Langages : Python, C/C++, Matlab, Lisp, SQL | **Libraries :** Numpy, Sklearn, OpenCV, Tensorflow, Matplotlib, Pandas
Frameworks / Tools : Github, ROS, Gazebo, Linux, Raspberry Pi, Qt, PostgreSQL

L A N G U A G E S

French - Native
English - Technical language practice
German / Spanish - Beginner

E X T R A C U R R I C U L A R

Cinema / Scifi / Robotics
Chess: Competitive practice (~2150 Elo rating, top 15 FR U18)
Combat sports: Amateur Boxing and Sanda