Computer Engineer

Seeking a permanent position from October 2025
Mobility: Auvergne–Rhône–Alpes region

Mathis Roubille

Nationality: French
Born: 2002
Location: France
Driver's license

+33 7 83 06 30 68
@ mathis.roubille@etu.uca.fr
LinkedIn: Mathis Roubille
Portfolio
GitHub: xerneas02
GitLab: maroubille

Personal Statement

As a third-year student at the ISIMA School of Computer Engineering, I am passionate about discovering and exploring the vast horizons of computer science. What I enjoy most about this field is solving technical challenges and exploring various possibilities to find the optimal solution. My academic journey has been marked by captivating projects, where I have been able to develop my technical skills and refine my creativity in problem-solving. My portfolio reflects this commitment. I am eager to apply this knowledge in a stimulating professional environment, where I can contribute effectively to innovative projects while continuing to grow as a computer engineer.

Education

2022 - Present — **Clermont Auvergne INP ISIMA Engineering School**
`Expected Graduation` : September 2025
`Relevant Courses` : Java, .NET/C#, C, C++, Simulation, Database

2023 — **TOEIC B2**
The TOEIC test is an English exam that assesses English proficiency in a professional context.

2020 - 2022 — **Preparatory Cycle - ISIMA**
Highly selective preparatory school for ISIMA

2020 — **Scientific Baccalaureate**
Lycée Albert Londres, Vichy

Professional Experience

Internship at Michelin, Clermont-Ferrand 2025
Built a Grafana status page for middleware monitoring.
Developed Python and k6 scripts to collect metrics via OpenTelemetry.

Skills: Grafana, Python, JavaScript, k6, OpenTelemetry.

Internship at UiT Arctic University of Norway, Narvik 2024
Created a GPT-3.5 chatbot for Master's applicants; report accepted at IEEM 2024.
Co-authoring paper "Analyzing the Impact of Large Language Models on Improving Chatbot Performance: A Case Study of chatUiT," scheduled for Summer 2025.

Skills: Chatbot development, GPT-3.5, AnyLogic, Python.

Tutor for Math and Computer Science Students 2023
Guided first-year Math and Computer Science students in coursework and projects.

Skills

Programming Languages :

★★★★★ Python, C/C++
★★★★☆ Rust, Java, LaTeX
★★★★☆ C#, HTML, CSS
★★★☆☆ JavaScript, SQL

Languages :

French : Native
English : Fluent
Japanese : Basic Knowledge
Spanish : Basic Knowledge

Others :

Blender : Intermediate
Docker : Beginner
GitHub/GitLab : Intermediate
Visual Studio Code : Advanced
Visual Studio : Intermediate
AnyLogic : Intermediate

Some Projects

BirdCards (2025)

Objectives:

Developed an interactive web application to help users learn bird species through flashcards featuring high-resolution images and authentic audio calls. Implemented quiz modes with customizable difficulty and user progress tracking stored in a SQLite database.

Tools:

- Python, Flask framework
- HTML5, CSS3, JavaScript (AJAX, Fetch API), Bootstrap
- SQLite for user data, Docker for containerization

Pokémon Red AI (2025)

Objectives:

Engineered an AI agent using reinforcement learning and NEAT to play Pokémon Red autonomously via the PyBoy emulator. Designed reward functions for exploration and battle success, logging performance metrics and visualizing learning curves.

Tools:

- Python, PyBoy emulator
- OpenAI Gym environment integration
- Stable Baselines3, NEAT-Python, Matplotlib for analysis

Rocket League Bot (2024)

Objectives:

Implemented a reinforcement learning agent for Rocket League, focusing on boost management, aerial control, and dynamic positioning. Trained through self-play over 10,000 episodes to achieve consistent beginner-level gameplay.

Tools:

- Python, TensorFlow
- Custom Gym Rocket League environment
- NumPy, Pandas for data processing

Minecraft Like (2022)

Objectives:

Built a voxel-based 3D environment in Processing, supporting block placement/destruction, infinite procedurally-generated terrain, and basic physics interactions. Implemented efficient chunk-based loading and Perlin noise for terrain variation.

Tools:

- Java, Processing library
- Perlin Noise algorithms, Multithreading for chunk management

Interests

Programming : I enjoy working on personal coding projects in my spare time, exploring different programming languages and technologies to enhance my skills.

Sports : Climbing is my main sport, and I have recently started ice skating, enjoying the challenges it brings.

Drawing : I find calm and creativity in drawing, experimenting with different styles and techniques to express my imagination.

Minecraft Map Creator : Collaborating with friends, I create complex Minecraft maps, which are some of my biggest projects.

Roubille Mathis Abrest France +33 7 83 06 30 68 @ mathis.roubille@etu.uca.fr