

Mohammed Amine El Ouardini

Computer Engineering Student

 mohammedamine.elouardini@etu.inp-n7.com

 +33 6 18 29 93 36

 4 Place Agapito Nadal, Toulouse 31300

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PROFIL

Engineering student passionate about AI, image processing, and computer vision, seeking an M1 internship in artificial intelligence. My experience at Velours3D in image processing, along with my projects in computer vision and deep learning, have enabled me to develop solid expertise that I wish to put at the service of an innovative R&D team. I am also highly proficient with advanced AI tools such as Claude Code and Cursor to accelerate prototyping, improve code quality, and rapidly explore new ideas, which strengthens my ability to develop high-performance and innovative solutions.

Professional Experience

STAGE IMAGE PROCESSING, VELOURS3D

06/2025 – 08/2025

- Quantitative and qualitative study of user-generated images for integration into a 3D application
- Image preprocessing and standardization using Python, OpenCV, and NumPy
- Automation and accelerated development using agentic AI tools: Claude Code and Cursor
- Implementation of automated pipelines for image enhancement, shadow removal, and background filtering
- Collaboration with design and development teams to integrate assets into the 3D workflow
- Exploration of neural network-based solutions to improve background removal and content isolation

TUTOR

Present

- Supporting middle school students in their academic journey and career guidance

EDUCATION

Engineering Degree, Toulouse INP - ENSEEIHT

2024 – 2027

Second year, Image & Multimedia specialization

CPGE -MPSI/MP, high school Errazi, Maroc

2022 – 2024 | Maroc

Mathematics, Physics, Computer Science, and Engineering Sciences

Scientific Baccalaureate, High school, Maroc

2021 – 2022 | Maroc

Mathematics specialization

PROJECTS

FOOTBALL ANALYSIS SYSTEM, MACHINE LEARNING / COMPUTER VISION / DEEP LEARNING

PYTHON

- Detection of players, referees, and ball using YOLOv8 and trackers
- Player segmentation by jersey color using KMeans
- Player movement tracking with Optical Flow and perspective transformation to measure distance and speed

- Complete project addressing real-world problems and ML model performance optimization

AUDIO APPLICATION

JAVA

- Interactive application for sound creation and manipulation
- Intuitive interface for audio editing and music creation

DATA COMPRESSION

ADA

- Implementation of compression algorithm with Huffman coding
- Performance optimization and memory management for large files

MINISHELL – INTERPRÉTEUR DE COMMANDES UNIX

C

- Operating systems (Process management, signals, I/O)

WEB PORTFOLIO

NEXT.JS & TAILWIND CSS

- Personal website with responsive design, light/dark mode, and smooth animations

SKILLS

Programming

Python, Java, ADA, C

ML/Computer Vision

OpenCV, YOLO, NumPy, Scikit-learn

Tools

Linux, Git(Hub/Lab), VS Code, Eclipse, MATLAB

IA & Automation

Claude Code, Cursor, GitHub Copilot

Critical Thinking

Effective Communication

Flexibility

Negotiation

LANGUAGES

Arabe: (maternelle)

Français: (Bilingue)

Anglais: (Courant)

Espagnol: (Débutant)

INTERSTS

- BasketBall
- Fitness
- Music & events