ASTRUC MATHIEU
LOOKING FOR END-OF-STUDIES INTERNSHIP (6 MONTHS)

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SUMMARY

Engineering student specializing in Artificial Intelligence and Big Data, with strong skills in programming, machine learning, and applied AI systems Curious and motivated, I thrive on challenges and continuous learning.

Currently looking for a 6-month end-of-studies internship starting in early March 2026 (flexible start date), with the possibility to continue the journey afterwards. Eager to apply my expertise and contribute to innovative projects in AI and data science.

WORK EXPERIENCE

Intern Researcher - NTNU (Norway)   Internship 2025 - 3 months

Research internship in social robotics and real-time AI systems:
- Developed gesture-based human–robot interaction with the NAO humanoid robot.
- Built a conversational assistant on Reachy, leveraging LLM fine-tuning and GPU-accelerated pipelines to optimize response times, dialogue flow, and human-in-the-loop handling.
- Designed a Robot–Robot Interaction (RRI) loop enabling autonomous collaboration between NAO and Reachy.

Work expected to contribute to two scientific publications.

Data Engineer Junior - Banque de France   Internship 2024 - 3 months

- Data Scraping Automation: Developed Python scripts integrating ElasticSearch for large-scale data scraping, enhancing data processing for AI models like Retrieval Augmented Generation (RAG).
- ASR Integration: Utilized Automatic Speech Recognition (ASR) to convert speech to text, improving automated spoken data analysis.
- Workflow Automation: Leveraged Selenium for efficient data retrieval and workflow automation.

OCR Project - Comat Specific (Hybrid)   Research Collaboration 2025 - 5 months

- Built an OCR pipeline (Python, doctr, OpenCV) using CNNs for handwriting recognition, extracting key specifications from 2D sketches and converting them into structured data. Enhanced robustness through preprocessing, error analysis, and iterative model improvements.

EDUCATION

ESAIP – Graduate School of Engineering - Angers, France   Sep 2021 - Jun 2026

- Engineer's Degree (5-year program)
- Specialization: Artificial Intelligence & Big Data
- Grade: ECTS A (highest, Top 10%)

Universidad Politécnica de Madrid (UPM) - Madrid, Spain   Sep 2025 - Feb 2026

- Exchange semester focused on advanced IT and data sciences, including machine learning, cloud computing, programming, and large-scale data processing architectures

SeAMK - Profesional Studies in Technology - Seinäkjoki, Finland   Jan 2024 - May 2024

- Exchange semester focused on IT and engineering courses, including C++, C#, embedded systems, object-oriented programming, artificial intelligence, electronics labs, and automation projects with Unity and TwinCAT.

Lycée Jean Perrin - Marseille, France   Sep 2018 - Jul 2021

- French Baccalaureate – High-Level Athlete Program, Basketball Training Academy - Specialty Physics and Human Sciences, Maths option

ADDITIONAL INFORMATION

- **Programming & Development :** Python, C#, C++, Linux shell, Version control (Git/GitHub/GitLab)
- **AI & ML:** LLMs, Fine-tuning, Computer Vision, Speech Recognition, Deep Learning, GPU-accelerated inference & real-time AI systems
- **Frameworks & Libraries :** PyTorch, TensorFlow, Hugging Face, scikit-learn, Keras, NumPy, Pandas, MATLAB/Octave, Azure AI
- **Project Management:** Jira, Git, MS Project, Adobe Suite, Office 365...
- **Languages:** English (C1), French (native), Spanish (B1)