

# Jules ESPINOUX

julespinoux@gmail.com | +33 6 82 75 75 45 | LinkedIn | GitHub | Website

Final-year Master of Engineering student at ISAE-SUPAERO, majoring in Data Science. Seeking a 6-month Software Engineering/Data Science internship starting March/April 2026.

## EDUCATION

### ISAE-SUPAERO

2022 – 2026

*Master of Engineering, Data and Decision Science*

*Toulouse, France*

- **Coursework:** Machine Learning, Deep Learning, Big Data Engineering, Data Structures and Algorithms, Mathematics (Optimization, Statistics, Advanced Probability, Linear Algebra).

### University of Limerick

Autumn 2024

*Erasmus semester, Data Science*

*Limerick, Ireland*

- **Coursework:** Machine Learning, Database Systems (SQL, AWS), Data Analytics.

### Lycée Déodat de Séverac

2020 – 2022

*PTSI - PT\*, Preparatory program for French top engineering schools (ranked 2<sup>nd</sup> in Mathematics)*

*Toulouse, France*

## EXPERIENCE

### Software Engineer Intern

August 2025

*Athena Studio*

*Luxembourg City, Luxembourg*

- Designed and implemented a full-stack dashboard using React.js and Supabase PostgreSQL database to monitor AI agent customer usage, improving visibility and decision-making.
- Implemented integration tests for Microsoft API features using the Vitest framework, reducing bugs by 90%.

### Software Engineer Intern

Feb. 2025 – July 2025

*Salomon*

*Annecy, France*

- Developed a beta mobile application with Flutter (iOS/Android), expanding the tester base from 8 to 120 users.
- Led backend development by building Serverless REST APIs with Node.js and designing scalable data pipelines with AWS DynamoDB and S3, enhancing data availability and supporting mobile feature integration.
- Automated multi-env deployments and CI/CD pipelines, including App Store and Play Store releases.
- Partnered with UX designer, led workshops, and conducted 10+ user interviews to refine features. Participated in daily Agile stand-ups, gaining solid Scrum experience.

### Software Engineer Intern

March 2024 – July 2024

*Centre National de Ski Nordique*

*Prémanon, France*

- Developed from scratch a full-stack analytics platform using PostgreSQL, FastAPI, Docker and Streamlit. Introduced new performance insights, and reduced race analysis time by 70%.

## PROJECTS

### Agents From Scratch | Python, LangGraph, LangChain, LangSmith, Pytest

July 2025

- Developed an end-to-end email management agent from scratch, integrating evaluation, human review, and memory to improve accuracy and adaptability.

### Hackathon ENS | PowerShell, Makefile, Docker

June 2025

- Built a PowerShell script to streamline Windows dependency setup, cutting bugs and boosting speed by 15%.

### Sokoban Game | Python, C, Streamlit, PostgreSQL, FastAPI, Docker

2023

- Built a Sokoban game and solver in C, achieving 50% faster solutions using binary trees. Designed a full-stack system with PostgreSQL, FastAPI, and Streamlit to store and visualize user performance data.

## TECHNICAL SKILLS

**Languages:** Python, TypeScript (Node.js, React.js), C, SQL, Git.

**Frameworks:** Flutter, Streamlit, FastAPI, Selenium, LangChain/LangGraph, Jest.

**Data Science:** Scikit-learn, PyTorch, TensorFlow.

**Developer Tools:** AWS, Docker, Fastlane, GitLab, GitHub, Jira.

## ADDITIONAL ACTIVITIES

- **Chess:** Competitive FIDE player (Elo 1954), consistently ranked top 20 nationally in French Youth Championships and multiple-time regional champion.
- **Triathlon** – Regularly compete in endurance events, demonstrating discipline, goal-setting, and long-term commitment to physical and mental performance.