# Jules ESPINOUX

Toulouse, France

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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

- Anticipated Coursework: Machine Learning, Deep Learning (PyTorch, TensorFlow), Data Engineering, Big Data Engineering, High Performance Computing.
- Coursework: 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/NoSQL, AWS), Data Analytics.

Lycée Déodat de Séverac

2020 - 2022

PTSI -  $PT^*$ , Preparatory program for French top engineering schools (ranked  $2^{nd}$  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

 Conceived 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

# ${\bf Agents\ From\ Scratch}\ |\ {\it Python,\ LangGraph,\ LangChain,\ LangSmith,\ Pytest}$

July 2025

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

# Hackathon ENS | PowerShell, Makefile, Docker

June 2025

- Created 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: Scikit-learn, Flutter, Streamlit, FastAPI, Selenium, LangChain/LangGraph, Jest.

Cloud & DevOps: AWS (Lambda, API Gateway, DynamoDB, S3), Docker, Supabase, Fastlane, GitLab CI/CD, GitHub Actions, 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.