# Jules ESPINOUX

Toulouse, France

julespinoux@gmail.com | +33 6 82 75 75 45 | Linked In | Git<br/>Hub | 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

 $\mathbf{ISAE}\text{-}\mathbf{SUPAERO} \\ \mathbf{2022} - \mathbf{2026}$ 

Master of Engineering. Data and Decision Science

Toulouse, France

- Anticipated Coursework: Advanced Machine Learning, Deep Learning (PyTorch, TensorFlow), Big Data Engineering, High Performance Computing.
- Coursework: Computer Science (Data Structures and Algorithms, Object-Oriented Programming), Mathematics (Optimization, Statistics, Advanced Probability, Linear Algebra).

## University of Limerick

Autumn 2024

Limerick, Ireland

 $Erasmus\ semester,\ Data\ Science$ 

- Coursework: Machine Learning, Database Systems (SQL/NoSQL, AWS), Advanced Data Analysis.

# 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 - Freelance

Aug. 2025 - Present

 $Athena\ Studio$ 

Luxembourg City, Luxembourg

- Developed a full-stack dashboard (React.js, Supabase, PostgreSQL); defined KPIs and applied data visualization to improve AI agent usage monitoring and decision-making.
- Implemented integration tests with Vitest and set up execution in GitHub Actions CI/CD pipelines, increasing automated test coverage from 0% to 85%.

## 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%.
- Collaborated with national biathlon coaches to deliver detailed data insights for the 2025 Biathlon World Championships, contributing to the French teams' record-breaking medal performance.

# Projects & Online Courses

#### Building Ambient Agents [Online Course] | Python, LangChain

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, C, SQL, Git.

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

Cloud & DevOps: AWS (Lambda, API Gateway, DynamoDB, S3), Docker, Supabase, Vercel, 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.