

Frédéric Zai

Junior Data engineer & full stack developer

Born: 20th December 1997 in Geneva • Nationality: French • Rue du jura 11, 1023 Crissier (Switzerland) •
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Profil

With experience across various sectors, I've developed a strong curiosity for business challenges, driving me to solve both technical and business problems using AI, data, and software engineering. My calm, analytical nature enables me to approach issues with serenity and collaborate effectively with teams.
Currently in my final year of a master's program, **I'm seeking an apprenticeship for September 2025.**

Education

Master's in data science IPSSI (Private Higher Institute of Information Systems)	Paris, France
<ul style="list-style-type: none">• Coursework: Python, machine learning, deep learning, data analysis, development & API, database management, Algorithms and data structures.• Thesis topic: <i>The role of AI in the sports talent scouting revolution</i>	Expected graduation June 2025
Bachelor's of science in computer science ESGI (Higher private school of computer engineering) - GPA: 16/20 with honors	Paris, France
<ul style="list-style-type: none">• Coursework: Software applications, relational databases, Object oriented programming, deployment ci/cd, docker, Linux, advanced algorithms, software architecture, web security.	Sept 2020 – July 2023

Work experience

Internship frontend developer Map SA	Cossonay, Switzerland
<ul style="list-style-type: none">• Developed and optimized websites and e-commerce platforms using WordPress and Php for over 6 client projects.• Developed an AI-powered tool using OpenAI GPT model to automate customer service (SAV) processes, analyzing client satisfaction surveys, improving response time by 40%. This enabled real-time performance tracking across project phases (proposal, delivery, maintenance), helping the company identify areas of improvement.	Sept 2024 – April 2025
Internship Web integrator & data analyst Publishing Factory SA	Lausanne, Switzerland
<ul style="list-style-type: none">• Encoding and optimization of sales paths for several campaigns in the natural health sector. Cleaned and prepared data for analysis.• Created automated Tableau dashboards for real-time tracking of campaign performance and sales conversions. Provided marketing teams with precise insights, enabling weekly optimization of strategies. Contributed to an 8% increase in sales over 6 months, demonstrating the value of data-driven decision-making.	Oct 2023 – April 2024
Internship full stack developer Phidias	Remote jobs
<ul style="list-style-type: none">• Developed an Odoo ERP module with python to centralize client needs, evaluations, and documents (previously in PDF format), streamlining workflows for accountants and Odoo consultants during client training sessions.• Successfully sold the module to 2 others Odoo partners located in France, allowing them to simplify their own client training processes.	Sept 2022 – Aug 2023

Projects

Development of a social media platform similar to X with AI capabilities	February 2025
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- Developed a social media platform using **React.js** for the front-end and **Node.js** for the back end, featuring real-time messaging with **Socket.io**.
- Integrated a **CNN-based facial recognition model** with **TensorFlow**, which activates the user's camera and detects positive emotions when reading tweets.
- AI-driven features include recommending similar tweets based on emotion detection and hashtags, optimizing content, and enhancing user engagement

Volunteer experience

Development of the commercial site of Valorum sarl | Valorum sarl

- As part of a school project, I contributed to the digital transition of Valorum, a pawnshop, by migrating their website from Joomla to the **Odoo CMS**.
- I collaborated with Yotech a tech company to integrate pages and develop an online jewelry evaluation module in **Python**. This project improved the website's functionality and streamlined the jewelry evaluation process.

Geneva, Switzerland

Feb 2021 – March 2021

Skills

Programming: Python, HTML, CSS, JavaScript, Php, SQL, React.js, Node.js, Django, Flask.

Machine learning & Deep learning: NLP, LSTM, CNN, Transformers, Scikit-learn, TensorFlow, Keras, Pytorch, OpenAI GPT

Big data & data processing: Pandas, Numpy, Spark, Kafka, Hadoop

Deployment & cloud: Docker, Git

Visualisation: PowerBi, Matplotlib, Seaborn

Erp & Cms: Odoo ERP, Wordpress Cms | **Office technology:** Excel, PowerPoint

Languages: French (mother tongue), English (B2 level), Spanish (B1 level)

Interests

Sports

- Basketball (Recreational): Passionate about basketball, I play recreationally to stay active and work on my teamwork skills.
- Cross-Fit & Weightlifting: I enjoy challenging myself physically through cross-fit and weightlifting, which helps me maintain good physical condition and develop personal discipline.

Reading

- Machine learning yearning from Andrew NG. Alongside my studies, I read books on machine learning, particularly those by Andrew NG, to deepen my skills in the field and better understand both theoretical and practical concepts.

Music

- MAO (music production): With 5 years of experience as a beatmaker, I create music using Music Production Software like Fruity loops, which helps me develop my creativity and proficiency in music production tools.