

# Frédéric Zai

Junior Data analyst & full stack developer

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**Age** : 27 years old | **Nationality** : French

**Portfolio**: [Frédéric Zai - Développeur full stack junior \(frederic-zai.netlify.app\)](https://frederic-zai.netlify.app)

**Github** : [zaity74 \(frederic zai\)](https://github.com/zaity74)

## Profil

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With four years of experience as an intern, I have evolved in various environments (ERP, B2B, digital marketing), developing a full stack development expertise and a strong interest in data science and AI. At the end of my Master 2 in Data Science, I have mastered Python, React.js, Node.js and advanced machine learning tools.

Available in April 2024, I am looking for a 6-month internship to deepen my expertise before starting my professional career

## Skills

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- **Web integration** : Html, Css, Sass, Bootstrap
- **Langages & Frameworks**: Python (Django, Flask), JavaScript (React.js, Node.js), SQL
- **Machine Learning & Deep Learning**: MLP, LSTM, CNN, Transformers, Scikit-learn, TensorFlow, Keras, PyTorch, OpenAI (GPT)
- **Big Data & Data processing** : Pandas, NumPy, Spark, Kafka, Hadoop
- **Database** : PostgreSQL, MongoDB, MySQL, NoSQL
- **Deployment & Cloud**: Docker, Kubernetes, CI/CD, Git, Azure, AWS
- **Visualisation & BI**: Power BI, Tableau, Matplotlib, Seaborn
- **Development tools**: GitHub, GitLab, CI/CD, Jupyter Notebook
- **CMS (Content management system)**: Wordpress, Elementor | **Design**: Photoshop, Illustrator
- **ERP**: Odoo | **Project management**: Azure Devops | **Office technology** : Excel, Word, Powerpoint

## Education

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### Master in data science

IPSSI (IPrivate Higher Institut of Information Systems)

Sept. 2023 – June 2025

Paris, France

### Bachelor Web engineering

ESGI (Higher School of computer engineering)

Sept. 2020 - July 2023

Paris, France

### Bachelor's degree in mathematics, computer science, engineering & physics

University of Poitiers

Sept. 2016 - June 2019

Poitiers, France

## Projects

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### **Development of a big data pipeline for predictive bitcoin analysis (school project)**

February 2025

- Simulated a real-time data stream on the bitcoin price and published via Apache kafka.
- Set up a Spark streaming job to consume, clean and transform data.
- Stored the processed data in a Hadoop cluster (HDFS).
- Implemented a machine learning model (linear regression, LSTM) to predict Bitcoin trends.

Development tools : Docker, Python, Apache Kafka, Apache Spark, Hadoop, Machine Learning (Scikit-learn, TensorFlow/Keras)

### **Prediction of 2024 Olympic Games results (school project)**

January 2025

- Collection and preparation of historical data for the Games for analysis and prediction.
- Implementation of several machine learning and deep learning models (MLP, LSTM) to predict the number of medals and identify the best nations.
- Used advanced data preprocessing, statistical modeling and hyperparameter optimisation techniques to improve model performance.

Development tools : Python, TensorFlow/Keras, Scikit-learn,

Pandas, NumPy, Matplotlib.

### **Analysis and prediction of earthquakes with big data and machine learning (school project)**

January 2025

- Deploy a Docker environment integrating Apache Hive, HDFS and Kafka to store and process massive seismic data.
- Cleaned and analyzed seismic data with Apache Spark, identifying significant events and their correlations.

- Implement time analysis in Spark Streaming to detect recurring patterns and anticipate earthquakes based on real-time seismic signals.
- Testing predictive models to assess whether a current signal can predict an imminent earthquake.

Development tools : Hadoop, Hive, HDFS, Spark, Spark streaming, Kafka, Docker, Python

## **Development of the commercial site of the Valorum Valorum Sarl store**

January 2021 – March 2021  
Geneva, Switzerland

Valorum Sarl

- As part of a school project, we supported a company in its digital transition. I participated in the development of the website of Valorum, a loan-on-pledge shop based in Geneva and Lausanne. The project consisted of migrating the old Joomla site to the Odoo CMS.
- In collaboration with Yotech, the company in charge of managing the site, I was responsible for the integration of the pages and the development of an online jewelry evaluation module in Python.

Online website : [123goldexpert.ch](https://123goldexpert.ch) | [Expertise - Vente et Achat d'Or](#)

## **Professional experiences**

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### **Frontend developer (internship)**

July 2024 – February 2025

Map.ch (Marketing agency)

Cossonay (Vaud),  
Switzerland

- Development of an AI in the company's internal software to automate the analysis and processing of customer returns with the aim of improving after-sales service.
- Use of a pre-trained OpenAI model.
- Development of websites and online shops using WordPress (WooCommerce, Elementor).

Skills acquired : Wordpress, Woocommerce, Elementor, html/Css, Php, FTP, Javascript, ManageWP, infomaniak, web security.

### **Web integrator (internship)**

October 2023 – April 2024

Publishing Factory SA (Marketing & Digital agency)

Lausanne, Switzerland

- Development of landing pages and order pages for marketing campaigns.
- Integration of analytics to measure campaign performance.
- Participation in the implementation of health events and programs with renowned experts.

Skills acquired : WordPress, JavaScript, SQL, HTML/CSS, Salesforce Marketing.

### **Fullstack developer (internship)**

October 2022 - August 2023

Phidias (Odoo ERP expert)

Marseille, France

- Development of an Odoo ERP module for the management of online training courses, independently and under supervision.
- Analysis and design: needs collection, prototyping, integration with Odoo.
- Development: Data modeling, automation (billing, reminders, evaluations).
- UX/UI improvement: Optimization of the interface and user tests.
- Testing and deployment: Unit tests, corrections and writing user guides.

Skills acquired: Python, JavaScript, SQL, XML, Git, Node.js, Docker, Linux, unit test, autonomy.

### **Web developer (internship)**

February 2021 – Sept. 2022

Yotech Sarl

Geneva, Switzerland

- Creation of websites using the Odoo CMS, especially for projects such as Dr Bekri (Swiss gynecologist) and MaBonneetoile (children's accessories e-commerce site).
- Management of the company's social networks (Instagram and LinkedIn), creation of visual content, after-sales service.

Skills acquired: Html/Css, Javascript, Git, Docker, Linux, JQuery, Python, Sql, Odoo framework, xml, Javascript

## **Languages**

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- French : Mother tongue | English : B2 Level | Spanish : B1 Level

## Activities

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- Self-taught musician in MAO (computer-assisted music) for 5 years
- Cross-fit and strength training
- Amateur basketball player for 6 years, in the basketball club of the Pays de Gex