

# Data Scientist / Software Engineer

Junior IT engineer seeking a full-time position (CDI/CDD)

👤 23 yo 🇫🇷 French 🚗 Driving licence 📍 Belgium or Luxembourg ☎️ +33 782 989 405 ✉️ soulaimanmarsou@outlook.fr

# SOULAIMAN MARSOU

🌐 <https://smarsou.fr> 🐙 [github.com/smarsou](https://github.com/smarsou) 🌐 Soulaiman Marsou

## PROFESSIONAL EXPERIENCE

### Mar 2024 - Aug 2024 PYTHON SOFTWARE DEVELOPMENT : DATABASE DESIGN & ETL PROCESS

Internship at ANIDRIS S.A. (Contern, Luxembourg)

- Implemented in **Python** an automated **ETL process** for **multi-source data acquisition** and processing.
- Designed a CMDB (Configuration Management Database) using a Tomcat app and a **PostgreSQL DB**.
- Integration of GRAPH API and internal **REST API using Python**.
- Managed a **Red Hat Enterprise Linux** environment and **CI/CD** pipelines with **GitLab**.
- Written **user documentation**, trained employees on the tool's usage and provided **technical support**
- Technologies: **Python, PostgreSQL, Tomcat, MS GRAPH API, Red Hat Enterprise Linux, Gitlab CI/CD**.

### Sept 2023 - Feb 2024 GENERATIVE AI RESEARCH PROJECT

At SOPRA STERIA (Strasbourg, France)

- Written a state-of-the-art research on LLMs about fine-tuning, optimization and comparison.
- Fine-tuned a model for code generation, optimized it using prompt engineering and quantization.
- Technologies: **Python, HuggingFace, QLoRA, llama.cpp, Jupyter Notebook, IBM Watson, LaTeX**

## EDUCATION

### MASTER'S DEGREE IN COMPUTER SCIENCE

IT ENGINEERING SCHOOL TELECOM NANCY

(Sept 2021 - Sept 2024), FRANCE

- Programming (Python, JAVA, C, PHP)
- Web-development (Flask)
- Data Science, Big Data & AI
- Soft skills
- Project Management (SCRUM, GANTT,...)

### BACHELOR'S IN MATHEMATICS & PHYSICS

Joffre High School, Montpellier

(2019-2021), FRANCE

## PROJECTS

### AI Development - Generated text detector (Python, Flask)

🔗 <https://smarsou.fr/lab/hackaton>

- Perform Exploratory Data Analysis (**EDA**) on text data using a notebook, and clean it for training.
- Vectorize the text data using FastText and train a classifier.
- Implement a **REST API using Flask** (Python) to serve the model.
- Deploy the model to a production **Linux VM** using **Docker**.

### ANALYTICAL MAPPING TOOL

🔗 <https://smarsou.fr/lab/viz>

- Data collection, cleaning, and transformation using **Python**.
- Dynamic map visualization over multiple years.
- Developed a web application for data exploration.

## HARD SKILLS

### Development

- Languages : Python, Java, C, PHP
- Web frontend/backend (Flask, Laravel, Spring)
- REST API Integration (Python, Flask, Spring)
- GITlab CI/CD pipeline configuration
- Containerization with Docker

### Environment

- Comfortable with Linux (Bash, Ubuntu, RHEL)
- Microsoft Azure (Databricks, SQL Server, VM)
- LaTeX

### AI

- Machine Learning (scikit-learn, PyTorch, matplotlib, pandas)
- Natural language processing (fasttext, word2vec, nltk)
- LLM fine-tuning (Huggingface Transformers)
- Integrate models in application with REST APIs

### Data

- Design and manipulate databases (SQL & NoSQL)
- Database administration (PostgreSQL, Hbase, MongoDB)
- Exploratory Data Analysis (EDA) with Python (Pandas, Matplotlib) or Spark (PySpark)

## LANGUAGES

- **French** - Mother tongue
- **English** - Read, write, communicate (TOEIC 890 points, B2 level)

## PROJECT MANAGEMENT

- SCRUM - agile project management
- Organize & animate meetings
- Planning management

## REFERENCES

- Jules Duarte Vala, AI Engineer at Sopra Steria