

# Mamadou Krouma

REMOTE SENSING SCIENTIST · DATA SCIENTIST/ENGINEER

Abidjan, CÔTE D'IVOIRE

☎ (+225) 0777029626 | ✉ mamadoukroumageoscience@gmail.com | 🏠 mkrouma.com | 📷 MKrouma

“Management and development of innovative solutions based on the latest technology.”

## Skills

<b>System</b>	Linux, Mac OS, Windows;
<b>Programming</b>	Python (+7 years), Bash script (+2 years), JS (+1 year);
<b>Geospatial</b>	Geopandas, Xarray, Rasterio, GDAL, QGIS;
<b>Engineering</b>	Architecture design, Spark, OLTP/OLAP, RDBMS Postgres/Postgis, FastAPI, Docker/Docker-compose, Kafka.
<b>Cloud</b>	AWS S3/RDS/EC2/Athena/Redshift/SES, Heroku, Databricks.

## Experience

### Satelligence

Abidjan, Côte d'Ivoire

GEOSPATIAL SPECIALIST

February 2021

- Automation: Help to **automate** internal processes with my data science and development skills. I am currently working on automating our quarterly deforestation reports provided to +4 clients in +10 regions;
- Analytics: **Deliver services, graphs and KPIs** that enable clients to better understand and make **optimal decisions** based on their data;
- Support: **Technical support** to a client in Abidjan with over 11 subsidiaries and 33,000 employees; training, field data acquisition.

### Spacesense.ai

Paris, France

REMOTE SENSING AND ML DEVELOPER

Juin 2020

- Work on the development of **two products** including the detection of soil properties and false NDVI from radar images;
- Satisfactory research and development with **test scores of at least 80 percent** on each product;
- Last project was sanctioned by an abstract presented at the EGU2021 conference by my manager, **BeyondCloudLink**.

## Side-Projects

### Jargon

Paris, france

LAMBDA ARCHITECTURE

October 2021

- A **freelance** project for a Senegalese client. Since one year, I add a new layer to the infrastructure. The project I'm most proud of, self-learning and especially practical;
- Services (**containers**) : Scrapping, FastAPI data integration, PostgreSQL/PostGIS RDBMS, PgADMIN db management, Metabase analytic.

### Learn-Data-Engineering

Germany

FUTURE DATA ENG.

Mai 2022

- I put it here because it is one of the best resources. Both theory and practice. I'm **70 percent** of the way;
- Courses run : fundamentals, schema design, platform and pipeline, security, data stores, Spark, Docker, FastAPI, Kafka, Airflow, MongoDB;

## Education

### Jedha Bootcamp

Paris, FRANCE

BACHELOR DEGREE IN FULLSTACK DATA SCIENCE

May 2021 - Exp. Jan. 2022

- 6 months part-time bootcamp, it allowed me to consolidate my knowledge and to focus on data science, engineering and industrialization.
- Modules : Python and data analysis, Big data and data engineering, Machine learning and deep learning, Model deployment.

### École Nationale des Sciences Géographiques

Paris, France

MASTER'S DEGREE IN PHOTOGRAMMETRY, POSITIONING AND DEFORMATION MEASUREMENT (PPMD)

Sep. 2019 - Exp. Sep. 2020

- Geo-imaging course, it consists in appropriating data acquisition techniques (vector, raster) and then processing them;
- Remote sensing: Lidar, Radar; Image processing: detection of contours, points of interest and matches.

### Institut National Polytechnique Félix Houphouët Boigny

Yamoussoukro, Côte d'Ivoire

ENGINEER DEGREE IN LAND SURVEYING

Sep. 2014 - Exp. July 2019

- Two first years of preparatory classes. I acquired a good level in mathematics, physics and computer science;
- Basic training in civil engineering and land surveying, this gave me skills in vector data acquisition.