

Abdallah Hakim Kone

Machine Learning Engineer

info.schalappe.page | github.com/schalappe | linkedin.com/in/abdallah-hakim-kone

Rennes, France
+33 6 67 63 93 99
konehakim@gmail.com

EXPERIENCE

Machine Learning Engineer

BNP Paribas

June 2025 – Present
Nantes, France

I take a data science team's models to production. We host every model in-house for security reasons.

- Package the team's models as APIs and batch jobs in Docker images, deployed on Domino Data Lab with GitLab CI/CD.
- Serve open-weight LLMs (Llama, GPT-OSS, Gemma, Mistral Medium), Whisper and Voxtral for speech-to-text, and the data scientists' BERT models.
- Build pipelines that transcribe conversations, then write a summary or check control points.
- Build RAG systems with BGE-M3 that suggest replies to customer emails, first on ChromaDB, now on an embedding store I wrote.
- Handle the network side of deployments and keep the model APIs reachable.
- Set up model monitoring and alerting with Arize and Kibana.

Stack: Python, Docker, GitLab CI/CD, Domino Data Lab, Transformers, ChromaDB, DVC, Arize, Kibana

AI Engineer (consultant)

Softeam

Jan. 2021 – June 2025
Rennes, France

Consultant for a major public-sector client, automating the processing of traffic violations from radar images with computer vision and tabular models.

- Rebuilt the vehicle identification model as a mixture of specialized experts, which reduced recognition errors.
- Designed a Swin Transformer classifier that rejects unusable radar images before processing.
- Developed heuristics that locate the violation zone in radar images.
- Automated retraining, from data collection to model selection (Optuna, Aim, MLflow).
- Improved the sampling of images sent for labeling, and added bootstrapped confidence intervals to the business metrics.
- Integrated the models into the production processing chain with the teams that run it (requirements, acceptance tests).
- Designed a secure training environment with architects and the CISO, and led GDPR compliance with legal experts.
- Mentored three junior engineers.

Stack: Python, TensorFlow, XGBoost, SHAP, OpenCV, Optuna, MLflow, Aim, FastAPI, Docker, RabbitMQ, MongoDB, GitLab

Data Scientist (work-study)

Orange Business Services

Sept. 2019 – Sept. 2020
Rennes, France

Built computer vision and simulation tools to analyze retail performance for a shopping-center operator.

- Benchmarked multi-object tracking models (Deep SORT, YOLO, SSD) to produce in-store retail KPIs.
- Built and deployed a similar-face search application.
- Prototyped a multi-agent reinforcement learning simulation of customer behavior.

Stack: Python, TensorFlow, PyTorch, OpenCV, Flask

AI Developer (internship)

Compagnie Ivoirienne d'Électricité

Apr. 2018 – Aug. 2018
Abidjan, Côte d'Ivoire

- Benchmarked object detection models (YOLO, SSD, Faster R-CNN) to detect incidents on the power grid.
- Built a cross-platform mobile app to manage grid incidents.
- Built an app that reads electricity meter indexes.

Stack: Python, TensorFlow

IT intern

Veone

Apr. 2017 – Sept. 2017
Abidjan, Côte d'Ivoire

- Deployed monitoring systems and managed services (Centreon).

Stack: Linux, Bash, Python, Centreon

EDUCATION

General engineering degree (Diplôme d'ingénieur)

IMT Atlantique

Sept. 2018 – Sept. 2020
Brest, France

Mathematics and signal processing, data science, software engineering, game theory.

Bachelor's degree in computer networks and systems

ESATIC

Sept. 2014 – Sept. 2017
Abidjan, Côte d'Ivoire

Networks and network administration, linear algebra, signal processing, statistics.

SKILLS

Modeling

LLMs, RAG, Speech-to-text, NLP (BERT), Computer vision, Tabular models, Reinforcement learning, Transformers, TensorFlow, PyTorch, scikit-learn, XGBoost

MLOps and infrastructure

Deployment pipelines, Networking, Model monitoring, Docker, Linux, GitLab CI, FastAPI, MLflow, DVC, Domino Data Lab, Mistral AI Studio, Arize, Kibana

Languages and data

Python, Rust, TypeScript, pandas, Polars, NumPy, MongoDB, Elasticsearch, RabbitMQ

Languages

French (native), English (professional)

CERTIFICATIONS

MLOps | Machine Learning Operations, Duke University

Jan. 2025

Machine Learning Engineering for Production (MLOps), DeepLearning.AI

Mar. 2023

Deep Learning Specialization, DeepLearning.AI

Oct. 2021

Advanced Machine Learning with TensorFlow on Google Cloud Platform, DeepLearning.AI

Nov. 2020

TensorFlow Developer Certificate, TensorFlow Certificate Program

Oct. 2020

L'Atelier RGPD, CNIL

Oct. 2020

Machine Learning, Stanford University

June 2019