

ACADEMIC BACKGROUND

Virtual University of Burkina Faso

Master's in Data Mining and Artificial Intelligence

2019 – 2021

Ouagadougou, BF

Aube Nouvelle University

Bachelor in Computer Engineering Technology

2015 – 2018

Bobo-Dioulasso, BF

PROFESSIONAL EXPERIENCE

Centre Muraz, National Institute of Public Health

Data Science Manager

Jul. 2022 – Jun. 2025

Bobo-Dioulasso, BF

- > Led data operations for the Afroscreen project, ensuring integrity, security, and accessibility across public health surveillance systems.
- > Developed and maintained scalable ETL pipelines to automate the integration of laboratory, field, and genomic data.
- > Built interactive dashboards using Power BI and Tableau to track key epidemiological KPIs and support real-time policy decisions.
- > Managed a multidisciplinary data team (statisticians, data managers, collection agents), fostering collaboration and capacity building.
- > Worked cross-functionally with technical, clinical, and policy stakeholders to streamline data flows and enable evidence-based interventions.

Kreezus SAS

Senior Machine Learning Engineer

Jun. 2021 – Jul. 2022

Ouagadougou, BF

- > Collaborated with technical leads and business units to translate operational needs into machine learning use cases with measurable development impact.
- > Integrated large language models (LLMs) and NLP pipelines for knowledge extraction from unstructured policy and financial documents.
- > Developed reusable MLOps workflows with CI/CD pipelines for model training, validation, and deployment on cloud-native infrastructure.
- > Contributed to AI strategy, including model governance, ethical AI standards, and responsible use frameworks aligned with public-sector accountability.

Huawei Technologies

Core Network Engineer

May 2018 – May 2021

Ouagadougou, BF

- > Conducted in-depth analysis and reporting of resource usage on Huawei core network equipment to support capacity planning.
- > Assist the planning and deployment of the 4G core network infrastructure for TELECEL FASO in collaboration with national stakeholders.
- > Monitored and optimized network performance parameters to ensure high availability, low latency, and secure connectivity.
- > Performed log analysis and proactive detection of security incidents across core systems to support network integrity.

NOTABLE PROJECTS

Optimization of the collection and analysis of Huawei network equipment data for pre-dictive maintenance

- > Objective: Exploit data from Huawei equipment (eNodeB, Core Network, OSS) to predict critical failures and improve network availability.
- > Tools: Kafka, Huawei eSight API, SNMP Traps, Spark, Python (scikit-learn, XGBoost), Grafana, Kibana, Power BI, Docker, Huawei FusionInsight for some internal Big Data processing.
- > Impacts: Reduction of major incidents on Huawei equipment and MTTR (Mean Time To Repair) thanks to early detection of critical anomalies.

Optimization of epidemic detection through health Big Data analysis

- > Objective: Cross hospital and geographic data to predict epidemic peaks (flu, dengue, COVID).
- > Tools: Hadoop, Spark MLlib, Python (Pandas, Scikit-learn), Power BI.
- > Impacts: Reduced response time for local health authorities.

Implementation of patient data governance for the Sainte Marie Madeleine Clinic (Bobo Dioulasso)

- > Objective: Structure a Data Catalog for patient data and standardize data quality practices (consistency, completeness, security).
- > Tools: Collibra, Talend Data Quality, PostgreSQL, Azure Data Catalog.
- > Impacts: Improved traceability of patient data.

Development of a dashboard for monitoring public health indicators

- > Objective: Enable health managers to access KPIs on vaccination, consultations, and mortality in real time.
- > Tools: Tableau, Power BI, PostgreSQL, Talend ETL.
- > Impacts: Faster and more targeted health decisions thanks to dynamic data visualization.

Development of an intelligent recommendation system for a SaaS platform Yalendar.com

- > Objective: Create a personalized suggestion engine for tools or features for users of a SaaS platform.
- > Tools: Python (FastAPI, scikit-learn), MongoDB, Docker, Kubernetes.
- > Impacts: Increased average usage per customer and reduced user churn.

TECHNICAL SKILLS

AI & Machine Learning Python (Pandas, scikit-learn, PyTorch, XGBoost), Deep Learning, Prompt Engineering, Model Fine-Tuning, AI Security (Adversarial Attacks, Evasion Attacks, AI Poisoning), MLOps (Model Industrialization, CI/CD for AI Models), MLflow, R (Statistical Modeling)

Cloud Platforms & AI Services Azure AI Studio, Azure OpenAI, Azure Machine Learning, AWS, Google Cloud, Microsoft Azure Cognitive Services, OpenAI's GPT, Azure's GPT, Gemini, OCI, Logic Apps, Functions, Event Grid

Data Engineering & Big Data Data Pipelines (Azure Data Fabric), Spark (Batch & Streaming), Kafka (Data Ingestion), ETL (Talend, Airflow, Apache NiFi), Data Lake Architecture, Azure Data Factory / AWS Glue, PostgreSQL, MongoDB

Software Engineering & DevOps Python (REST API - FastAPI), Hybrid AI Coding Approaches, AI as a Service (AIaaS) Integration (Python/Django and Node.js), Docker, Kubernetes, Azure DevOps (Co-pilot Chatbot Integration, Chatbot Studio, CI/CD), GitLab, Azure Repo, Automated Testing (Web, Node.js)

BI & Data Visualization Power BI, Tableau, Matplotlib, Seaborn, Plotly, Grafana / Kibana, Advanced SQL

Governance & Quality Collibra / DataHub, Talend Data Quality, Data Catalog, MDM (Basics), Data Lineage (Airflow)

SOFT SKILLS

Leadership & Communication Team Leadership, Data Evangelism, Storytelling, Facilitation of Project and Technical Teams, Effective Communication (Bridging IT, Data, and Business Teams)

Strategic Impact & Problem-Solving Ability to tackle real-world problems with innovative, scalable, and efficient solutions, Presenting Business and Technical Issues, Critical Thinking (Ability to Challenge Business Needs)

Results Orientation Ability to Turn Data Projects into Measurable Business Value, Capable of Working Under Tight Schedules and Delivering High-Quality Results Within Deadlines

Collaboration & Adaptability Team Spirit and Cross-functional Cooperation (Data Owners, IT Department, Business Teams), Exposure to Agile Development Methodologies and Experience Working in Cross-functional Teams, Complex Project Management (Multi-team, Multidisciplinary, Sometimes Under Pressure)

Continuous Learning Permanent Technological Curiosity (Monitoring Data/AI/Telecom Trends), Teaching and Vulgarization (Training or Evangelizing Around Data Culture)

Organizational Acumen Organizational and Prioritization Skills (Managing Multiple Initiatives Simultaneously), Strong Grasp of Regulatory Requirements in the Financial Industry (e.g., AML, GDPR, or Basel III)

★ AWARDS AND RECOGNITION

GénieTIC Competition of the Ministry of Digital Economy and Posts

2016

Awarded 3rd place

Ouagadougou, BF

- Bronze medal at the 2016 National GenieTIC competition for young startupperes in Burkina Faso.

Seeds for the Future program organized by Huawei

2019

Recipient of the program

Ouagadougou, BF; Shenzhen, CN

- Two-week training in China (Beijing and Shenzhen) on Chinese culture, Huawei technologies, Big Data, 5G, and the Internet of Things.

LANGUAGES

French: Native

English: Fluent