

Ibrahim Maïga

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EXPERIENCE

Semper8, Toronto, Canada

Sep 2024 – Present

AI Developer

- Identify, evaluate, and manage relevant data sources to support data analytics and to meet organizational needs.
- Recommend different systems, architectures, and data storage technologies to support data-driven solutions.
- Develop and deploy complete machine learning/deep learning production systems for a variety of industry use cases that meet the needs of a specific operational/business process.
- Assess and apply appropriate mathematical models, algorithms, tools, and frameworks to develop A.I.-enabled, industry-specific solutions.
- Design and present A.I. solutions effectively to stakeholders with data visualizations.
- Apply legal, ethical, privacy, and security-related standards and considerations in data science projects in a manner that protects privacy and confidentiality, addresses data bias and transparency, and ensures data integrity.
- Implement artificial intelligence systems on time and budget using best practices and strategies in design thinking, project management, and lifecycle management.

BMS-SA, Bamako, Mali

Jan 2022 – Dec 2023

Financial Analyst

- Built automated financial dashboards using Excel and Power BI, streamlining the reporting process and reducing the time required for report generation.
- Produced semiannual financial performance reports, tracking key performance indicators, which helped executives monitor financial health and operational efficiency.
- Contributed to the preparation of the company's annual budget by using historical financial data, industry trends, and market research to forecast revenues, expenses, and cash flows.
- Supported the month-end close process, preparing and reviewing journal entries, balance sheet reconciliations, and variance explanations to ensure the integrity of financial statements.
- Developed and maintained financial models using VBA, incorporating advanced sensitivity analysis techniques such as scenario analysis and Monte Carlo simulations.
- Collaborated extensively with the accounting, treasury, and operations teams to ensure accurate financial reporting and alignment with corporate goals.
- Delivered semiannual presentations to board of directors, communicating insights, and supporting recommendations with clear financial evidence.

Orange, Bamako, Mali

Jan 2021 – Aug 2021

Data Specialist

- Implemented query optimization techniques such as indexing and partitioning, along with correctly defining data types and layouts. This resulted in a reduction in query execution time and improved system responsiveness.
- Administered SQL databases, performing routine maintenance, backups, and performance tuning.
- Designed multiple web scrapers to gather client questions from Orange Mali websites, Twitter, and Facebook pages, forming a valuable dataset for training and optimizing the company's retrieval-based chatbot.
- Developed and maintained ETL pipelines to integrate data from various internal and external sources, enhancing data integration efficiency through automation.
- Managed the company's data infrastructure, including databases and data warehouses. Ensured data was securely stored, easily accessible, and well-organized.

- Conducted regular audits to ensure data integrity, accuracy, and consistency across all systems.
- Played a key role in migrating legacy database systems to the cloud, enhancing system reliability.

Freelancer.com, Remote

May 2020 – Oct 2020

Financial Data Analyst

- Conducted portfolio performance analysis for investment clients, evaluating historical returns, volatility, and risk measures, leading to optimized asset allocation strategies.
- Utilized Microsoft Excel to develop financial models, conduct sensitivity analysis, and design automated dashboards for tracking essential financial metrics.
- Employed R for statistical analysis, developing predictive models to forecast revenue growth and expense trends.
- Analyzed large financial datasets to identify trends, correlations, and anomalies, delivering insights.
- Maintained a 5-star rating on the platform through consistent delivery of high-quality analysis and timely project completion, receiving positive feedback for attention to detail and deep understanding of financial data.

EDUCATION

George Brown College, Toronto, ON

Jan 2024 – Expected Dec 2024

Postgraduate Diploma, Applied A.I. Solutions Development

Major Courses:

Full Stack Data Science System, Design Thinking for AI, Mathematical Concepts for Deep Learning, Mathematical Concepts for Machine Learning, Big Data Tools & Techniques, Data Visualization Techniques, Deep Learning II, Machine Learning II.

University of Ottawa, Ottawa, ON

Sept 2017 – Dec 2021

Honours Bachelor of Science, Financial Mathematics and Economics

Major Courses:

Machine Learning Methods, Bayesian Statistics, Categorical Data Analysis, Time Series, Analysis of Experimental Design, Financial Mathematics, Financial Econometrics, Options and Futures, Equity Valuation, Industrial Organization II.

CERTIFICATIONS

Databricks

Expected Jan 2025

Certified Data Engineer Associate

AWS

May 2024

Certified Data Engineer Associate

IBM

Jun 2022

Data Science Professional Certificate

TECHNICAL PROJECTS

[Analytics Solution for AML Transaction Monitoring](#)

Oct 2024

Created an end-to-end ETL pipeline to enhance AML transaction monitoring for financial institutions using AWS services such as Aurora MySQL, Glue, DMS, and Athena. The project includes database migration, ETL processing, and cost-effective querying, with a focus on security best practices and efficient cost management for AML compliance.

[Traffic Sign Recognition system with YOLOv8](#)

Aug 2024

Constructed an efficient Traffic Sign Recognition system by fine-tuning the YOLOv8 model. Designed for real-time object detection, it identifies and classifies traffic signs to enhance autonomous driving and smart traffic systems.

[Cloud-based automated cryptocurrency trading solution](#)

Jul 2024

Developed Flypto, an automated cryptocurrency trading platform using advanced predictive modeling and real-time analysis of market news and social media sentiment to optimize trading strategies across seven cryptocurrencies.

[Big Data Analysis with PySpark](#)

Jun 2024

Built a big data ETL pipeline for a research project using technologies like Spark, Snowflake, and Hadoop to analyze correlations between weather patterns and societal metrics, such as birth rates and crime statistics, across Canada and the USA, delivering insights to support policy and operational strategies.

[Keras and LSTM Networks for Analyzing Airline Customer Sentiment](#)

May 2024

Designed a deep learning model using Keras and LSTM networks for analyzing airline customer sentiment, achieving 86.39% accuracy in predicting positive or negative reviews based on recommendation likelihood.

[Data visualization and storytelling using Tableau for Film Production Strategy](#)

Apr 2024

Bon Films Inc., a film company, leverages data-driven insights to analyze trends, optimize runtimes, select genre-suited directors, and strategically time releases, enhancing profitability and audience engagement.

[Predicting the Success of SpaceX Falcon 9 Landings](#)

Jan 2024

A machine learning project predicting SpaceX rocket landing success using classification models and GridSearchCV, featuring data scraping, exploratory analysis, and interactive visualizations to provide cost estimation insights and assess optimal launch site locations.