Ibrahim Maïga

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OBJECTIVE

Dedicated data professional seeking a position in a data-centric organization to leverage my expertise in data science, AI, and finance to drive impactful business outcomes.

HIGHLIGHT OF QUALIFICATIONS

- Develop, construct, test and maintain architectures, such as databases and large-scale processing systems.
- Aptitude to investigate large volumes of data from diverse industries and communicate observations and findings using various reporting tools.
- Proven experience working with cross-functional teams, including Finance, IT, Legal, and Privacy, on data-driven initiatives.
- Working knowledge of accounting hierarchies and finance workflows.
- Strong understanding of data governance frameworks, risk and control procedures, and data lifecycle management.
- Excellent communication and organizational skills, with the ability to cultivate and maintain effective working relationships.

EXPERIENCE

Outlier.ai, Remote   **Jan 2025 – Present**
Freelance Applied Mathematician

- Evaluate the factual accuracy and relevance of AI-generated domain-specific text.
- Craft and answer high-quality mathematical questions, ensuring clarity, solvability, and originality.
- Assess, refine, and rank AI-generated responses, identifying strengths and areas for improvement.

Semper8, Toronto, Canada   **Sep 2024 – Dec 2024**
AI Analyst Co-op

- Fine-tuned two AI models for a finance project, including a BERT-based sentiment analysis tool for real-time cryptocurrency news classification and a Facebook Prophet model for short-term price trend forecasting using historical and sentiment data, achieving up to 91.6% accuracy.
- Implemented ensemble modeling techniques to combine multiple algorithms, enhancing overall predictive performance.
- Designed and deployed ETL pipelines to extract data from NewsAPI, Reddit, and Binance, transforming and storing structured data in MongoDB for downstream machine learning workflows.
- Architected a scalable cloud infrastructure on AWS, incorporating services like EC2, Lambda, S3, and CloudWatch to support real-time data ingestion and sentiment analysis pipelines.
- Authored a detailed project proposal covering business context, customer needs, value proposition, technical differentiators, implementation roadmap, risk analysis, and success metrics.
- Maintained well-documented codebases and project artifacts in GitHub and OneDrive to ensure knowledge transfer and continuity for future developers.
- Collaborated with team members on weekly syncs, shared technical guidance, and ensured timely delivery of project milestones in coordination with the internship supervisor.

BMS-SA, Bamako, Mali   **Jan 2022 – Dec 2023**
Financial Analyst

- Audited financial data integrity across the accounting hierarchy, validating Chart of Accounts, journal entries, and trial balances, using Python, SQL, Alteryx, and Power BI, enhancing audit traceability and improving compliance assurance.

- Designed and maintained automated financial reporting and reconciliation dashboards using NetSuite, SQL, and Power BI, cutting report preparation time by 40% and supporting accurate month-end close processes.
- Led development of predictive models and interactive dashboards in Excel to forecast revenue trends, detect anomalies, and improve decision-making for audit and investment initiatives.
- Built automation tools using Python, VBA, and SQL to streamline recurring financial analysis and generate audit-ready reports (TT, Disclosure, Legal, Lead Schedules), reducing manual effort by 30%.
- Conducted business process reviews to optimize financial reporting workflows and reconciliation procedures, collaborating with accounting and IT teams.
- Partnered with IT stakeholders to implement automated reporting solutions, eliminating bottlenecks and improving financial data consistency.
- Produced semiannual financial performance reports for executive leadership, tracking KPIs related to revenue, expenses, and operational efficiency.

Orange, Bamako, Mali   **Jan 2021 – Aug 2021**
Data Specialist

- Collaborated with cross-functional teams to gather business requirements and design data-driven solutions, reducing data processing time by 35%.
- Configured Row-Level and Column-Level Security in Azure Synapse Analytics to enforce data access controls and ensure compliance with privacy standards.
- Developed and maintained 15+ interactive dashboards and reports in Power BI, improving operational efficiency and boosting user engagement through intuitive visualizations and data storytelling.
- Implemented anomaly detection techniques using R to identify patterns indicative of customer churn, enabling retention strategies.
- Programmed 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.
- Played a key role in migrating legacy database systems to the cloud, enhancing system reliability.
- Authored comprehensive data dictionaries and catalogs to support metadata management and improve data discoverability across the cloud ecosystem.
- Extracted, transformed, and validated data from diverse sources including SQL Server, Excel, SharePoint, ServiceNow, and Azure DevOps using Power Query, complex SQL scripts, and DAX.
- Designed and optimized SQL queries, stored procedures, and views to support robust data models and ensure high-quality, consistent reporting outputs.
- Supported BI infrastructure, troubleshooting, and Power BI Gateway integration for real-time, auto-refreshing reports connected to on-premises and cloud data sources.

Freelancer.com, Ottawa, Canada   **May 2019 – Dec 2020**
Freelance Financial Data Analyst

- Conducted portfolio performance analysis for investment clients, evaluating historical returns, volatility, and risk metrics to inform asset allocation strategies.
- Created and maintained financial models with built-in sensitivity analysis and Monte Carlo simulations, supporting scenario planning and investor reporting.
- Built financial dashboards and reporting frameworks in Excel and Power BI to enhance client decision-making and reporting accuracy.
- Analyzed large vendor and financial datasets to deliver insights through internal assessments and presentations, supporting cross-functional strategy.

- Performed stakeholders needs analysis across departments to align financial data practices with broader business goals.
- Executed cloud cost optimization projects with BigQuery and Looker, leveraging Cloud Logging, Billing, and Information Schema to uncover usage patterns and implement TCO analysis and anomaly detection. Achieved $100K+ in savings and enhanced real-time visibility across 25+ projects.

Affinity Gear, Ottawa, Canada   **Apr 2018 – Apr 2019**

Ecommerce Analyst

- Conducted in-depth analysis of website performance and user behavior using tools such as Google Analytics, Similarweb, and GoatCounter, contributing to a 15% increase in conversion rates and a boost in returning customer visits over 12 months.
- Implemented and managed Google Tag Manager to track over 20 custom events and key e-commerce interactions, improving campaign performance metrics and marketing attribution by over 30%.
- Analyzed customer journeys, traffic sources, and high-exit pages to identify UX bottlenecks, recommending UX enhancements that reduced cart abandonment by 12% and lowered bounce rates.
- Developed and maintained interactive dashboards to monitor KPIs including conversion rate, average order value, customer lifetime value, and session duration, enabling weekly reporting that informed strategic decisions across teams.
- Supported marketing performance analysis that improved audience targeting and creative strategy, resulting in a 25% increase in email campaign click-through rates and a 20% lift in Facebook ad return on ad spend.
- Executed over 10 A/B and multivariate tests, resulting in UX enhancements that improved checkout flow efficiency and lifted sales conversion.

PROJECTS

Analytics Solution for AML Transaction Monitoring

An 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.

Cloud-based automated cryptocurrency trading solution

Flypto is 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

A scalable 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.

EDUCATION

George Brown College, Toronto, ON   **2024**

Postgraduate Certificate, Applied A.I. Solutions Development

University of Ottawa, Ottawa, ON   **2022**

Honours Bachelor of Science, Financial Mathematics and Economics

CERTIFICATIONS

- *AWS Certified Data Engineer Associate*
- *IBM Data Science Professional Certificate*