

# Ibrahim Maïga

Richmond Hill, ON • (613) 252-7048 • [contactme@ibrahimmaiga.com](mailto:contactme@ibrahimmaiga.com) • [Website](#) • [LinkedIn](#)

## HIGHLIGHTS OF QUALIFICATIONS

- Possess strong written and verbal communication skills, with the ability to collaborate effectively across different teams.
- Aptitude to analyze large volumes of data from diverse industries and communicate observations and findings using various reporting tools.
- Experienced in process automation, ETL pipeline design, and database administration.
- Proficient in developing AI solutions, achieving high testing accuracy.
- Effective at leading projects from ideation to execution, ensuring alignment with strategic objectives.
- Strong comprehension of data governance, risk management, and compliance across multiple industries.

## TECHNICAL SKILLS

**Programming languages:** Python | SQL | R | VBA | LaTeX.

**Tools:** Microsoft 365 | Git | Spark | Snowflake | Hadoop | Hive | Power BI | Tableau | SSAS | SSIS | Dbeaver | Jira | Confluence.

**Cloud Computing Platforms:** AWS | Azure | Google Cloud.

## 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 Developer Co-op***

- Recommended architecture and data storage strategies to support scalable and efficient analytics.
- Utilized ensemble modeling to combine multiple algorithms, achieving improved predictive performance.
- Designed and deployed A.I. systems within budget, employing the best practices and strategies in design thinking, project management, and lifecycle management.
- Presented A.I. and data solutions to stakeholders, demonstrating value using compelling visuals and metrics.

**BMS-SA, Bamako, Mali**

**Jan 2022 – Dec 2023**

***Financial Analyst***

- Built automated financial dashboards, streamlining the reporting process and reducing the time required for report generation.
- Produced semi-annual financial performance reports, tracking key performance indicators, which helped executives monitor financial health and operational efficiency.
- 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.

**Orange, Bamako, Mali**

**Jan 2021 – Aug 2021**

***Data Specialist***

- Implemented query optimization techniques resulting in reduced query execution time and improved system responsiveness.
- Administered SQL databases, performing routine maintenance, backups, and performance tuning.
- Developed and maintained ETL pipelines to integrate data from various internal and external sources, enhancing data integration efficiency through automation.
- Played a key role in migrating legacy database systems to the cloud, enhancing system reliability.

**Freelancer.com, Ottawa, Canada**

**May 2020 – Oct 2020**

***Freelance Financial Data Analyst***

- Conducted portfolio performance analysis for investment clients, evaluating historical returns, volatility, and risk measures, leading to optimized asset allocation strategies.
- Utilized 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.

**Affinity Gear, Ottawa, Canada**

**Apr 2018 – Aug 2018**

***Ecommerce Analyst***

- Analyzed website traffic and customer behavior patterns, providing insights to optimize the online shopping experience.
- Conducted A/B testing and multivariate testing to improve user experience.
- Implemented Google Tag Manager and enhanced e-commerce tracking, ensuring proper event tracking and data collection for more comprehensive analysis.

**ACN, Ottawa, Canada**

**May 2017 – Aug 2017**

***Seller***

- Sold diverse services, including high-speed internet, landline telephone service, hydroelectricity, and Interact machines, effectively increasing service adoption and customer engagement.
- Achieved strong sales results, earning a promotion to Executive Team Trainer (ETT) in less than a month.
- Trained and mentored new sales representatives, improving team performance and contributing to overall sales growth.

## 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 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.

### 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 high 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.

## EDUCATION

### **George Brown College, Toronto, ON**

Jan 2024 – Dec 2024

*Postgraduate Diploma, Applied A.I. Solutions Development*

*Major Courses:*

Full Stack Data Science System, Design Thinking for AI, 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.

## CERTIFICATIONS

### **AWS**

May 2024

*Certified Data Engineer Associate*

### **IBM**

Jun 2022

*Data Science Professional Certificate*