

# Mohammed Ibrahim

📍 Vancouver, Canada   ✉️ mohammedga1999@gmail.com   📞 +1 778 227 1087   [in LinkedIn](#)   [📄 GitHub](#)

## Summary

Data Scientist with a strong engineering foundation and hands-on experience in applied data analysis, machine learning, and statistical modeling. Experienced in working with real-world operational and sensor data to drive performance insights and data-driven decision-making. Brings a practical, problem-solving mindset, strong collaboration and communication skills. Motivated to apply data science to practical, impactful problems.

## Key Skills

- **Languages & Tools:** Python, R, SQL, CSS, HTML, JS, GitHub, Quarto, Docker, Plotly, Altair, Shiny, VScode, Rstudio, Rstan, PostgreSQL, MongoDB,
- **Machine Learning:** Supervised & Unsupervised Learning, CNNs, Scikit-Learn, Time-series models
- **Data & Analytics:** Data Visualization, Statistical Analysis, ETL Pipelines, A/B Testing
- **Infrastructure:** CI/CD Workflow, Big Data & Cloud Computing

## Education

**University of British Columbia** Vancouver, Canada  
*Master of Data Science (Fully Funded by Mastercard Foundation Scholars Program)* Sep 2025 – Jun 2026

- **Relevant Coursework:** Machine Learning, Data Visualization, Applied Statistics, Data Science Workflows, Cloud Computing,

**University of Khartoum** Khartoum, Sudan  
*BSc in Electrical and Electronics Engineering (Honors)* Oct 2015 – Dec 2021

- **Concentrations:** Software engineering
- **Relevant Coursework:** Networks, Cybersecurity, Engineering Economics, Database

## Projects

**Bank Marketing Analysis** Nov 2025 – Dec 2025  
*University of British Columbia*

- Developed a model to predict whether clients will subscribe to a term deposit using the Bank Marketing dataset
- Selected the final model based on accuracy score after comparing multiple classification models
- Applied feature engineering and polynomial feature selection to explain drivers of customer behavior
- Implemented reproducible analysis pipelines using Quarto and Docker

**Data Frame Optimizer Python Package** Dec 2025 – Jan 2026  
*University of British Columbia*

- Built a dataframe optimization package that downcasts numeric, categorical, and unique columns to reduce memory usage while preserving data accuracy
- Implemented safe type inference and conversion strategies to maintain DataFrame structure and prevent rounding errors
- Established a Git-based CI/CD workflow with automated testing, versioned releases to PyPI, and continuous API documentation deployment using Quartodoc

**Interactive Uber 2024 Performance Dashboard** Feb 2026 – Mar 2026  
*University of British Columbia*

- Developed an end-to-end interactive dashboard to visualize annual performance metrics and KPIs for company stakeholders
- Built a natural-language chat feature that allows users to request customized visualizations from the database, making data exploration intuitive and tailored to stakeholder needs
- Applied Python and data visualization tools (Plotly, Shiny for Python) to deliver a scalable solution supporting data-driven decision-making

## Professional Experience

**Instrumentation Engineer** Khartoum, Sudan  
*MT Industrial Supplies and Services* Dec 2022 – Oct 2024

- Analyzed flow, pressure, and temperature time-series data to validate system performance and commissioning accuracy
- Identified abnormal sensor behavior, supporting data-driven troubleshooting of industrial measurement systems
- Produced structured daily reports, SAT documentation, and performance handover reports for senior management
- Led instrumentation commissioning for two 8-inch flowmeters and associated flow computers during the Block 5A rehabilitation project in Tharjath, South Sudan, contributing to a 30% boost in production output

**Solar Engineer** Khartoum, Sudan  
*Freelance* Dec 2021 – Oct 2024

- Delivered solar electrification projects across River Nile and Red Sea states, generating over 436 kWh of clean energy and bringing reliable power to more than 200 people for the first time
- Evaluated solar system performance through load estimation, generation capacity analysis, and reliability assessments to support data-informed sizing for off-grid and rural applications
- Delivered solar power systems for five farms, replacing unreliable grid electricity and boosting their agricultural production by 25%

## Leadership Experience

**Volunteer** Port Sudan, Sudan  
*World Food Program (WFP)* Apr 2024 – Jul 2024

- Produced data-driven assessments of essential goods requirements and coordinated distribution to vulnerable populations

**Teacher** Northern State, Sudan  
*Volunteer* Oct 2023 – Jan 2024

- Delivered structured lessons to secondary-school students in home village Al Barkal during periods of displacement, maintaining learning continuity under challenging conditions