

# MOSTAFA RAFIUR WASIB

Machine Learning Engineer | AI Engineer | Data Scientist | LLM/RAG & MLOps

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## PROFESSIONAL SUMMARY

Machine Learning Engineer and AWS-certified AI professional with 5+ years across AI, machine learning, data analytics, applied research, and client-facing technical delivery. Currently working as an AI Engineer at Genesis AI Garage, building AI/ML systems for startup clients and founders across LLM-powered RAG, document processing, structured evidence extraction, tabular ML, anomaly detection, forecasting, APIs, dashboards, cloud deployment, monitoring, and technical handover. Strong at turning ambiguous client problems into practical systems with clear evaluation, documentation, production-readiness planning, and stakeholder communication.

## CORE SKILLS

**Machine Learning:** Tabular classification, feature engineering, offline experimentation, model evaluation, anomaly detection, forecasting, recommendation systems, XGBoost, Gradient Boosting, Random Forest, Logistic Regression, SVM, scikit-learn, PyTorch, TensorFlow/Keras.

**Data & Documents:** Python, SQL, pandas, NumPy, PDF ingestion, text parsing, OCR/image-to-text workflows, chunking, metadata extraction, embeddings, semantic search, vector databases, structured outputs.

**LLM / GenAI:** RAG, structured extraction, evidence extraction, prompt engineering, LangGraph, LangChain, OpenAI API, Anthropic Claude, AWS Bedrock, citation-grounded responses.

**MLOps / Cloud:** FastAPI, Docker, Git, GitHub Actions, CI/CD, MLflow-style tracking, logging, model/data monitoring, drift checks, Grafana dashboards, alerts, runbooks, AWS, Azure, GCP, S3, Athena, Lambda, EC2, IAM, CloudWatch, Glue, PostgreSQL/RDS, pgvector, Cloud Run, Cloud SQL, REST APIs, ETL/ELT.

## PROFESSIONAL EXPERIENCE

### AI Engineer | Genesis Group Inc. / Genesis AI Garage | St. John's, NL

Jan 2025 - Present

- Build production-focused AI and ML systems for startup clients and founders across problem discovery, data preparation, model development, backend APIs, cloud deployment, monitoring, documentation, and handover.
- Contributed to 9 confidential AI Garage startup/client projects across environmental analytics, healthcare, biotech, accessibility, retail, B2B AI/data analytics, business operations, audio AI, and 3D assessment workflows.
- Develop RAG platforms that ingest unstructured documents, parse and chunk content, generate embeddings, retrieve relevant evidence, and produce structured, citation-grounded responses.
- Build document-processing and evidence-extraction workflows using PDF ingestion, text parsing, clause-level chunking, metadata filtering, semantic retrieval, and LLM-based structured output generation.
- Prototype and evaluate tabular prediction, forecasting, anomaly-detection, and recommendation models using scikit-learn, XGBoost/Gradient Boosting, Random Forest, PyTorch/TensorFlow, and offline evaluation metrics.
- Validated an agentic recommendation workflow on an 18,000+ product catalog and a 24/24 passing live test panel before demo and rollout planning.
- Design AWS-enabled data, analytics, and monitoring workflows using S3, Athena, IAM, CloudWatch, Python automation, SQL, and Grafana for secure reporting and operational visibility.
- Support team-lead responsibilities across AI Garage projects by coordinating technical work, reviewing implementation plans, guiding junior contributors, and aligning delivery with client needs.

### AI Project Intern | Genesis Group Inc. / Genesis AI Garage | St. John's, NL

Sep 2024 - Dec 2024

- Improved anomaly-detection and forecasting workflows for industrial and operational data using Python, feature engineering, model evaluation, and dashboard-based reporting.
- Built and evaluated predictive models using Gradient Boosting, XGBoost, Random Forest, LSTM, and autoencoder approaches for tabular and time-series ML use cases.
- Connected AWS Athena outputs and analytics results to Grafana dashboards for reporting, monitoring, client review, and production planning.

### Data Analyst Intern | Stella's Circle & Choices for Youth | St. John's, NL

Jun 2024 - Aug 2024

- Cleaned, standardized, and transformed program datasets into structured, integration-ready formats, including JSON outputs for downstream use.
- Built KPI dashboards and reporting summaries to support program reviews, operational decisions, and team communication.
- Improved reporting quality through validation checks, consistent formatting, documented assumptions, and clearer transformation logic.

### Community Researcher Intern | Canadian Council on Rehabilitation and Work | St. John's, NL

Feb 2024 - Apr 2024

- Collected, organized, and analyzed employment-access data for research, reporting, and accessibility-focused recommendations.
- Prepared concise summaries of trends, barriers, and practical insights for workforce inclusion initiatives.

## Research Assistant | Visual and Analytic Computing Lab, Memorial University of Newfoundland | St. John's, NL

Oct 2023 - Dec 2023

- Supported applied AI and data research through dataset preparation, preprocessing, model experimentation, visualization, image/medical-data analysis, and documentation.
- Worked with image and medical-data processing workflows, including feature extraction, classification experiments, evaluation, and reproducible analysis.

## IT Admin & Data Analyst | Vision One Consultancy | Phnom Penh, Cambodia / Remote

Jan 2022 - Jul 2023

- Built dashboards, automated ETL processes, and improved data quality for business reporting and operational decision-making.
- Analyzed operational data and user logs to identify trends, issues, and process improvements, translating business needs into KPIs and reports.

## Data Science Intern | Maxis Berhad | Kuala Lumpur, Malaysia

Sep 2019 - Feb 2020

- Performed data preparation, outlier detection, exploratory analysis, and dashboard development for business reporting.
- Built Power BI and Tableau dashboards to communicate operational trends and prototyped routing and Azure IoT demo workflows using map/API integrations.

## SELECTED AI/ML CASE STUDIES

- **Environmental Forecasting & Anomaly Detection:** Built forecasting, feature-engineering, thresholding, offline-evaluation, dashboard-reporting, and monitoring handover workflows for operational sensor analytics. Proprietary data and production code cannot be shared.
- **Document Intelligence & RAG:** Built ingestion, parsing, chunking, embeddings, semantic retrieval, metadata filtering, and structured LLM response workflows for document-heavy business use cases.
- **Agentic Recommendation & Ranking:** Tested retrieve-rank-reason workflows, metadata handling, ranking logic, behavior-learning support, and frontend-facing outputs for product discovery.
- **Artinus B2B AI/Data Analytics:** Supported AI workflow design, retrieval logic, structured outputs, monitoring documentation, and production-readiness planning for business insight generation.

## EDUCATION

### Master of Artificial Intelligence

Memorial University of Newfoundland, Canada | Sep 2023 - Dec 2024

### Bachelor of Computer Science, Artificial Intelligence

University of Malaya, Malaysia | Sep 2015 - Feb 2020

## CERTIFICATIONS

- AWS Certified Machine Learning Engineer - Associate, Amazon Web Services | Issued May 2026 | Expires May 2029
- Mitacs Invention to Innovation Skills Training, SFU Beedie Executive Education | Issued Jun 2025
- AWS Academy Graduate - AWS Academy Cloud Foundations, Amazon Web Services | Issued Jan 2020
- Getting Started with AWS Machine Learning, Coursera | Issued Jul 2020
- Introduction to Data Analytics for Business, Coursera | Issued Jul 2020
- AI For Everyone, Coursera | Issued Jun 2020