

AJIBOLA JEREMIAH DEDENUOLA, M.Sc.

Data Scientist | Machine Learning Engineer (Applied ML | MLOps | Cloud)

Winnipeg, MB, Canada | 204-599-0606 | ajdedenuola@gmail.com | github.com/JDede1 | JDede1.github.io

PROFESSIONAL SUMMARY

Machine Learning Engineer experienced in building reproducible ML pipelines, automated training workflows, and production ML systems on GCP. Skilled in supervised learning, deep learning, NLP/LLMs, and operationalizing models with MLflow, Docker, Airflow, and CI/CD. Brings 5+ years of data engineering experience supporting clean ETL flows, reliable feature pipelines, and high-quality model inputs. Known for delivering scalable, maintainable ML systems with strong monitoring, validation, and drift detection.

CORE SKILLS & TECHNOLOGIES (Technical Skills)

Machine Learning Engineering & MLOps: MLflow, Docker, Airflow, FastAPI, CI/CD Pipelines (GitHub Actions), Deployment Workflows, Model Serving (real-time & batch inference), Automated Testing, Production ML Systems, Model Monitoring (Evidently AI)

Machine Learning & Deep Learning: Python (Pandas, NumPy, Scikit-learn, XGBoost), Feature Engineering, Hyperparameter Tuning, PyTorch, Keras, RoBERTa, BART, Hugging Face, NLP/LLMs, RAG (FAISS), Siamese Networks

Cloud & Infrastructure: Google Cloud Platform (GCP), Vertex AI, Cloud Run, Cloud Storage, IAM, Terraform, Containerized Training & Inference, Scalable ML Systems

Data Engineering & Pipelines: BigQuery, ETL Automation, Data Validation, Data Quality Checks, Batch Workflows, Feature Pipelines, Feature Store Concepts, Schema Design

Monitoring & Tools: Evidently AI, Logging/Metrics, Git, Bash, Jupyter, VS Code

PROFESSIONAL EXPERIENCE

Manifest & Company Inc. — Data Scientist (Applied ML & MLOps)

Remote — Canada | Jul 2025 — Present

- Designed and deployed production ML systems on Vertex AI and Cloud Run, enabling scalable real-time and batch inference.
- Built training and evaluation pipelines on Vertex AI, improving reproducibility and reducing manual execution.
- Integrated MLflow for experiment tracking, model registry, and artifact versioning to support structured model promotion.
- Containerized preprocessing, training, and serving workflows using Docker for consistent local-to-cloud execution.
- Automated feature pipelines and evaluation workflows in Airflow, reducing training cycle time by ~30%.
- Implemented data validation, monitoring, and drift-detection pipelines with Evidently AI, reducing debugging time by ~20%.
- Added CI/CD pipelines (GitHub Actions) with automated testing, packaging, model versioning, and deployment triggers.

Tech: MLflow, Docker, Airflow, Vertex AI, Cloud Run, Terraform, Python, Scikit-learn, XGBoost, PyTorch, GitHub Actions, Evidently AI

Canada Revenue Agency (CRA) — Trust Accounts Examination Officer (Data Quality & Analytics)

Winnipeg, MB | Aug 2021 — Nov 2024

- Reconciled 3–5 years of payroll, GST/HST, and remittance datasets across CRA systems, identifying mismatches and structural anomalies.
- Built SQL and Excel-based validation workflows, reducing manual review effort by ~25% and improving examination consistency.

- Standardized reconciliation templates and quality-check procedures to support reproducible, audit-ready workflows.
- Analyzed behavioural and temporal patterns to detect anomalies and support risk classification.

Tech: SQL, Excel, Data Validation Tools, Automated Reconciliation Scripts

Northland Properties — Junior Business Analyst (Data Operations & Reporting)

Winnipeg, MB | Jan 2017 – Aug 2021

- Consolidated and cleaned multi-property datasets (PMS, POS, financial activity) to improve schema consistency and analytical reliability.
- Automated SQL/Excel reporting workflows, reducing manual reporting time by ~40% and increasing refresh reliability.
- Standardized KPI definitions and reporting templates across hotel and restaurant properties.
- Analyzed demand, customer behaviour, and regional performance to support pricing and operational decisions.

Tech: SQL, Excel Automation, Reporting Pipelines, KPI Dashboards, Data Cleaning Scripts

SELECTED PROJECTS | *Full code, diagrams, and reproducible pipelines on [GitHub \(see link\)](#).*

Loan Default Prediction — End-to-End MLOps Pipeline

Tech: Python, XGBoost, Scikit-learn, MLflow, Docker, Airflow, Vertex AI, Cloud Run, Terraform, Evidently AI, Optuna

- Built an end-to-end MLOps pipeline for data prep, feature engineering, training, tuning, evaluation, deployment, and monitoring.
- Logged experiments and registered models in MLflow; containerized training & inference and deployed to Cloud Run.
- Automated batch inference, training, and drift detection workflows using Airflow; implemented drift monitoring with Evidently AI.

RAG System for Canadian Banking FAQs — Retrieval-Augmented Pipeline

Tech: Python, SentenceTransformers, FAISS, FastAPI, Streamlit, Phi-3 Mini

- Built a modular RAG pipeline with ingestion, preprocessing, embedding generation, FAISS indexing, retrieval, and LLM response generation.
- Developed FastAPI backend for retrieval + generation, optimized FAISS similarity search, and reduced hallucinations using “I don’t know” fallback.
- Built a Streamlit UI with evidence tracing; automated data cleaning, chunking, and embedding regeneration.

Transformer Fine-Tuning (RoBERTa & BART) — NLP Model Training Pipeline

Tech: Python, Hugging Face Transformers, Datasets, PyTorch

- Developed reproducible training pipelines for fine-tuning RoBERTa and BART on classification and generative tasks.
- Implemented preprocessing workflows (tokenization, cleaning, padding/truncation).
- Achieved ~0.93 accuracy on classification tasks and strong BLEU/ROUGE scores on generative evaluations.

EDUCATION

University of Arizona — M.Sc. in Information Science and Machine Learning

Tucson, AZ, USA | Jan 2023 – May 2025 | GPA: 3.78/4.00 | [Verification Link](#)

Thompson Rivers University — Post-Baccalaureate Diploma, Human Resources Management

Kamloops, BC, Canada | Apr 2014 – May 2016

University of Ibadan — B.Sc. in Zoology

Ibadan, Nigeria | 2010

CERTIFICATIONS

DataTalks.Club — MLOps Zoomcamp Certificate | Aug 2025 | [Credential Link](#)

Oracle — Oracle Certified Foundations Associate: AI Foundations | Oct 2025 | [Credential Link](#)