

Temi Otun

Edmonton, Alberta · 403-991-6176 · otun@ualberta.ca · TemiOtun.com

EDUCATION

University of Alberta	Expected April 2027
<i>Bachelor of Science, Major in Computing Science –Artificial Intelligence</i>	<i>Edmonton, AB</i>
<ul style="list-style-type: none">Relevant Coursework: Algorithms I, Machine Learning I, Linear Algebra II, Calculus II	

WORK EXPERIENCE

Research Assistant	January 2025 – Present
<i>TMIC Wishart Node</i>	<i>Edmonton AB</i>
<ul style="list-style-type: none">Enhanced long range temperature forecasting system, achieving 42% higher accuracy than baseline across an 11-year datasetEngineered multivariate time series models for precipitation forecasting, outperforming baseline in 73% of test yearsDeveloped and optimized end to end forecasting pipelines in Python, implementing advanced feature engineering and benchmarking 20+ ML models (LSTM, iTransformer, XGBoost)	

Undergraduate Research Assistant	September 2024 – Present
<i>University of Alberta</i>	<i>Edmonton AB</i>
<ul style="list-style-type: none">Contributing to 3 machine learning systems in computational psychiatry and predictive healthcare, including dementia detection and ECG signal modeling on large scale clinical datasets, improving diagnostic accuracySynthesized insights from 40+ research seminars, on survival analysis and disease prediction, applying advanced statistical and ML methods to strengthen ongoing projectsDocumenting and analyzing 15+ ML experiments, applying feature engineering, hyperparameter tuning, and evaluation pipelines to improve performance across classification and regression tasks	

Data Management Intern	January 2024 – May 2024
<i>InfoStrux</i>	<i>Vancouver, BC</i>
<ul style="list-style-type: none">Optimized 25+ SQL queries in Snowflake, reducing execution time by up to 60% and boosting performance of business intelligence dashboardsCollaborated with senior data engineer to design Snowflake staging and curated layers for 3 datasets; wrote and tuned 30+ queries, improving data reusability and cutting time-to-insight by 40%Designed and maintained 10 database schemas in Snowflake to support diverse data types, improving pipeline efficiency and data flow	

PROJECTS & RESEARCH

Project	January 2025
<i>Lung Cancer Detection</i> Github	<i>Edmonton, AB</i>
<ul style="list-style-type: none">Achieved a recall score of 99%, accuracy score of 94%, precision score of 95%, and f1 score of 97% on the best classification modelBuilt and compared multiple ML models (SVM, k-NN, Random Forest, LightGBM) to determine the most effective approach for clinical datasetsApplied feature preparation techniques including SMOTE, normalization and cross-validation to handle class imbalance and improve model performance	

Research	September 2024 – November 2024
<i>Process-2025</i>	<i>Edmonton, AB</i>
<ul style="list-style-type: none">Developed ML models on audio datasets for early detection of dementia and mild cognitive impairment, tackling both classification and regression tasksBuilt a Random Forest model for the ICASSP 2025 SPGC challenge, achieving accurate patient classification into 3 diagnostic categories with evaluation scoresExplored self-supervised and pre-trained models from prior research,improving predictive metrics (F1, recall, precision, and RMSE) compared to baseline	

Project	August 2024
<i>Emotion Detection Neural Network</i>	<i>Calgary, AB</i>
<ul style="list-style-type: none">Trained a deep learning model on the FER 2013 Kaggle dataset (32,000+ labeled images) for multi-class emotion recognitionImplemented a CNN from scratch in PyTorch with OpenCV, incorporating activation functions, batch normalization, and max pooling layersBenchmarked pre-trained architectures (ResNet, VGG) achieving 70% accuracy and comparing results against the custom CNN	

Project	July 2024
<i>Basketball Chatbot</i> GitHub	<i>Calgary, AB</i>
<ul style="list-style-type: none">Engineered a Chatbot in Python connected to a SQL database containing 4800+ NBA players and 30+ teams for basketball queriesDesigned a custom interface in SwiftUI enabling users to interact through queries on players and team statisticsIntegrated Firebase authentication with encrypted credentials, ensuring secure login and data protection for users	

SKILLS

Programming: C, Python, SQL
Libraries & Tools: PyTorch, TensorFlow, Scikit-learn, OpenCV, Pandas, NumPy, Matplotlib, Darts, Nixtla, Git
Scholarships and Awards: Jason Lang Scholarship
Certifications: SnowPro Core, Bloomberg Market Concepts
Languages: English, Yoruba
Interests: Basketball, Football, Hiking, Weightlifting