

Temí Otun

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EDUCATION

University of Alberta	Expected April 2027
<i>Bachelor of Science, Major in Computing Science –Artificial Intelligence Specialization</i> Edmonton, AB	
<ul style="list-style-type: none">Relevant Coursework: Algorithms I, Machine Learning I, Introduction to Reinforcement Learning, Linear Algebra II, Calculus III, Introduction to Artificial Intelligence, Introduction to Applied Statistics II, Computer Organization and Architecture IAwards: Jason Lang Scholarship	

EXPERIENCE

Machine Learning Intern	January 2025 – August 2025
<i>The Metabolomics Innovation Centre</i> Edmonton AB	
<ul style="list-style-type: none">Enhanced long-range temperature forecasting system, resulting in up to 47% lower MAE with an average 24.3% improvement across a six-year test set compared to previous approachesDeveloped multivariate time series models for precipitation forecasting, incorporating 100+ climate features and outperforming baseline models in 73% of test yearsAssembled forecasting pipelines with advanced feature engineering and benchmarked 20+ ML models, attaining a 42% accuracy improvement over baseline methodsAutomated SQL pipelines to ingest weather and climate data from APIs and web scrapers, generating new feature combinations to support testing and improvement of forecasting models	

Machine Learning Research Assistant	September 2024 – Present
<i>University of Alberta</i> Edmonton AB	
<ul style="list-style-type: none">Contributed 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> Vancouver, BC	
<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 dashboardsPartnered with a 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%Constructed and maintained 10 database schemas in Snowflake to support diverse data types, improving pipeline efficiency and data flow	

PROJECTS

<i>Emotion Detection Neural Network</i> Github	<i>August 2025</i>
<ul style="list-style-type: none">Trained a deep convolutional neural network (CNN) in PyTorch on the FER 2013 dataset (32k+ labeled images), utilizing OpenCV for multi-class facial emotion recognitionAchieved 70% test accuracy across 7 emotion classes, outperforming baseline models by 15%, and integrated webcam inference to enable real-time emotion detectionIncorporated preprocessing techniques (grayscale normalization, resizing, augmentation) with RELU activations and batch normalization, to improve model accuracy	

<i>Personal Website</i> Github	<i>June 2025</i>
<ul style="list-style-type: none">Launched a personal portfolio with React and Tailwind CSS, hosted on Vercel with backend email integration on Render, providing a platform showcasing AI/ML and software projectsImproved user experience with interactive UI features, leveraging Framer Motion, Vanta.js, and React-Scroll for animations and dynamic backgrounds	

<i>Lung Cancer Detection</i> Github	<i>January 2025</i>
<ul style="list-style-type: none">Accomplished 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) to determine the most effective classification approachApplied preprocessing techniques including SMOTE, and k-fold cross-validation to address class imbalance and improve model performance	

<i>Research</i>	<i>September 2024 – November 2024</i>
<ul style="list-style-type: none">Refined ML models on audio datasets for early detection of dementia and mild cognitive impairment, tackling both classification and regression tasksDeveloped 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 models	

<i>Basketball Chatbot</i> Github	<i>July 2024</i>
<ul style="list-style-type: none">Created a Chatbot in Python connected to a SQL database containing 4800+ NBA players and 30+ teams, enabling queries on player stats, team rosters, and historical dataDesigned a custom interface in SwiftUI alongside Firebase authentication with encrypted credentials, ensuring secure login and data protection for users	

SKILLS

Programming: C, Python, SQL
Libraries & Frameworks: PyTorch, TensorFlow, scikit-learn, NumPy, Pandas, OpenCV, Matplotlib, Darts, Nixtla, React, Tailwind CSS
Tools & Platforms: Git, Linux, Bitbucket, Docker, Snowflake
Spoken Languages: English, Yoruba