Temi Otun

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EDUCATION

University of Alberta **Expected April 2027**
Bachelor of Science, Major in Computing Science –Artificial Intelligence *Edmonton, AB*

- ***Relevant Coursework:*** *Algorithms I, Machine Learning I, Formal Systems and Logic in Computing Science*

WORK EXPERIENCE

Research Assistant **January 2025 – Present**
TMIC Wishart Node *Edmonton AB*

- Advancing data preprocessing skills by building weather-based web scrapers, updating and cleaning databases alongside feature engineering techniques such as autocorrelation, partial-correlation, interpolation
- Creating a weather prediction application, by experimenting with ARIMA, LSTM, Transformers, RNN, and ML time series-based models

Research Assistant **September 2024 – Present**
University of Alberta *Edmonton AB*

- Conducting projects based in computational psychiatry and predictive healthcare modeling
- Participating in weekly presentations to discuss the recent findings from PhD and Master students in the field of survival analysis, heart disease predictions, and related fields
- Contributing to research by documenting experiments, assisting, and supporting other researchers in the lab

Data Management Intern **January 2024 – May 2024**
InfoStrux *Vancouver, BC*

- Actively engaged in optimizing query performance using Snowflake's UI and SQL code to create advanced data models
- Aided in designing data architecture in Snowflake leading to an in-depth understanding and analysis of data structures
- Created databases and schemas to work with structured, semi-structured and unstructured data through Snowflake's UI system

EXTRACURRICULARS

Project **January 2025**
Lung Cancer Detection Github *Edmonton, AB*

- Implemented SVM, k-NN, Random Forest, Xgboost, Logistic Regression, Lightgbm, and Catboost on a Kaggle lung cancer dataset
- Leveraged feature preparation techniques such as SMOTE and standardization in combination with cross-validation
- Achieved a recall score of 99%, accuracy score of 94%, precision score of 95%, and f1 score of 97% on the best classification model

Research **September 2024 – November 2024**
Process-2025 *Edmonton, AB*

- Utilized an audio dataset to perform classification and regression tasks for early detection of dementia, and MCI
- Participated in the ICASSP 2025 SPGC challenge to develop a random forest model that classified patients as 1 of 3 classes with their respective scores
- Experimented with self-supervised and pre-trained models from past research to improve prediction scores such as f1, recall, precision and RMSE

Project **August 2024**
Emotion Detection Neural Network *Calgary, AB*

- Designed a Convolutional Neural Network from scratch using TensorFlow and OpenCV utilizing activation functions, BatchNormalization and Maxpooling
- Utilized the FER 2013 Kaggle dataset of over 32,000 labeled images to train the supervised model for emotion recognition
- Applied pre-trained models, such as Resnet and VGG achieving an overall accuracy of 70%

App **July 2024**
Basketball Chatbot (Python, SQL, Swift) GitHub *Calgary, AB*

- Created a Basketball Chatbot using Python and a Kaggle SQL database holding over 4800 NBA players and 30 teams
- Used Swift UI to create a custom interface so users can query the Chatbot about Basketball related questions
- Integrated Firebase for user authentication and sign-in, ensuring secure access and data encryption for emails and passwords

SKILLS

Languages: C, Python, and SQL
Libraries: Darts,Matplotlib, NumPy, Nixtla, OpenCV, Pandas, Pytorch,Sklearn and TensorFlow
Scholarships and Awards: Jason Lang Scholarship
Certifications: Bloomberg Market Concepts, and Snowpro Core Certification
Spoken Languages: English and Yoruba
Interests: Basketball, Football, Hiking, Machine learning, and Weightlifting