Mohammad Hasibur Rahman

mhr9808@mavs.uta.edu | linkedin.com/in/mohammad9/ | github.com/MohammadHR10 | Arlington, TX | (817) 936-7412

EDUCATION

University of Texas at Arlington | Arlington, TX — December 2026
Bachelor of Science in Computer Science — GPA: 3.40

TECHNICAL SKILLS

Programming & Scripting: Python, R, Java, C, JavaScript; **Excel & Automation**: VBA Macros, XLOOKUP, VLOOKUP, PivotTables, Power Query; **Data Analytics**: Pandas, NumPy, R (tidyverse, ggplot2), SQL, Power BI, Streamlit; **Machine Learning & AI**: Scikit-learn, TensorFlow, PyTorch; **workflow Automation**: Python (openpyxl, pandas), Excel VBA for Reporting; **Database Management**: MySQL, PostgreSQL

EXPERIENCE

QBitLab | Remote — June 2024 – August 2024
Machine Learning Intern | Data Annotation, *Machine Learning, Computer Vision, UX Optimization*

- Built an AI-powered waste classification model that achieved 85% accuracy in identifying waste materials from user-submitted images and recommending appropriate recycling methods.
- Improved user engagement by 45% through a streamlined interface and increased model efficiency by 30%, optimizing classification speed and accuracy.
- Conducted extensive testing and validation using a diverse dataset of waste materials, reducing model error rates by 15% through iterative refinements.

Undergraduate Research Opportunity Program | Arlington, TX — January 2024 – May 2024
Research Assistant | *Android Studio, Java, Machine learning*

- Developed an app using Unity for displaying a 3D interface based on signal data.
- Enhanced user interactivity by 40% through intuitive design and interactive elements.
- Integrated app with Meta Quest 3 for immersive 3D visualization of signals in noisy environments.

University of Texas at Arlington | Arlington, TX — August 2023 – May 2024
Undergraduate Student Assistant | *Yolov5, Roboflow, PyTorch, Python, Deep Learning*

- Created a signal detection model using Yolov5 and trained it with PyTorch, improving accuracy by 35%.
- Annotated 1,000 signal images with Roboflow to prepare data for model training.
- Demonstrated the risk of undetected radar signals by applying Gaussian, Salt & Pepper, and Speckle noise to spectrums.

ACTIVITIES & LEADERSHIP

Students in Computing and Artificial Intelligence | Arlington, TX — October 2023 – Present
Founder & Former-President

- Led 9 workshops on Data Analytics and Machine Learning over 25 students each, boosting engagement by 60%.
- Co-organized UTA Datathon Spring 2024 and collaborated with UTA libraries for data visualization workshops.

PROJECTS

Automated Email Reporting System | *VBA, Excel Automation, Email Integration, Data Analysis* — Jan 2024

- Engineered a VBA macro that automated the generation of weekly reports, reducing the manual reporting time by 75% and increasing stakeholder engagement by 40% through timely information delivery.
- Streamlined communication processes by developing an automated email system within Excel, resulting in a 60% decrease in response time from stakeholders and improving overall project coordination across teams.
- Analyzed stakeholder feedback and iteratively improved the reporting features of the macro, achieving a user satisfaction score of 90%, which facilitated data-driven decision-making for over 15 ongoing projects.

Income Classification Project | *Pandas, Scikit-Learn, Streamlit, One-Hot Encoding, SMOTE* — Nov 2024

- Cleaned data by handling missing values and irrelevant columns, applied One-Hot Encoding and Label Encoding for categorical variables, addressed class imbalance using SMOTE, and normalized numerical features using MinMaxScaler.
- Applied Decision Tree (80.87%), Naive Bayes (79.56%), and Logistic Regression (80.06%) to predict income classification, optimizing accuracy with SMOTE and normalization.
- Developed an interactive web app using Streamlit to visualize model predictions and allow users to input data for real-time income classification.

Data Consolidation and Reporting System | *VBA, Excel Automation, Workflow Optimization, Data Integration* — Oct 2024

- Engineered a VBA macro that streamlined the data consolidation process across 15 Excel files, reducing report generation time from 3 hours to just 30 minutes, an efficiency improvement of 83% in workflow management.
- Automated the integration of over 10,000 rows of data into a single comprehensive report, enhancing accuracy by minimizing human errors and significantly reducing reporting discrepancies by approximately 40%.
- Collaborated with cross-functional teams to optimize data analysis workflows, facilitating access to real-time insights for over 50 stakeholders and improving decision-making speed by an impressive 60%.

CERTIFICATIONS & AWARDS

Nokia Outstanding Pre-Professional CS Student ($1000) — April 2024
Open Award (UTA Research Commons) for most viewed project for "Minions Fitness Tracker" — March 2024

PUBLICATIONS

- RF-Vision: Object Characterization using Radio Frequency Propagation in Wireless Digital Twin, In IEEE Xplore [Accepted]. — Nov 2024
- "Speclearn: Spectrum Learning in Shared Band under Extreme Noise Conditions," In IEEE International Symposium on Dynamic Spectrum Access Networks" [Accepted]. — May 2024