Azizul Haque

Jersey City, NJ | ahaque3@stevens.edu | +1 201 539 6109 | Linkedin.com/in/meazizul

Professional Summary

Graduate student in Applied Artificial Intelligence at Stevens Institute of Technology with expertise in machine learning, data science, and web development. Experienced in data analysis, predictive modeling, and AI-driven applications. Passionate about leveraging artificial intelligence to solve real-world problems. Strong background in full-stack development and automation, with hands-on experience in Python, C++, and AI frameworks.

Education

Stevens Institute of Technology, Master of Engineering in Applied Artificial Intelligence — Expected Graduation: Dec 2026

- **Coursework:** Applied Machine Learning, Probability and Stochastic Processes, Data Acquisition, Modeling and Analysis: Deep Learning.

City University, Bachelor of Science in Computer Science and Engineering — May 2016 - Apr 2020

Coursework: Artificial Intelligence, Data Structures and Algorithms, Software Engineering

Experience

Data Analyst, Next Ventures – Dhaka, Bangladesh — May 2021 – Oct 2024

- Collected and analyzed large datasets to support business decisions and improve operational efficiency
- Developed and maintained databases, data systems, and analytics tools to streamline data processing
- Utilized SQL and Python, for statistical analysis and data visualization.

Senior Web Developer, ExertPro LLC – Dhaka, Bangladesh — May 2020 – Apr 2021

- Developed and maintained scalable web applications, improving performance by 30 percent.
- Led a team of 3 developers to ensure efficient project execution and delivery.
- Integrated AI-based features into web applications for enhanced user experience.

Academic Projects

Multi-Class Depression Detection Using MentalBERT — Jan 2025 – Present

- Built a transformer-based model using MentalBERT to classify Reddit posts into three depression levels.
- Pre-processed and balanced a dataset of 3,800 mental health texts for training.
- Fine-tuned the model with class weighting, early stopping, and optimized tokenization.
- Achieved strong accuracy and balanced precision recall across all categories.
- Developed a real-time web interface and visualized results using a confusion matrix and word clouds.

Fake News Detection Using Machine Learning — Jan 2025 – Present

- Built a fake news classifier using the LIAR2 dataset with custom preprocessing and TF-IDF feature extraction.
- Implemented and evaluated a Logistic Regression model achieving 69 percent accuracy and AUC of 0.76.
- Visualized keyword importance, confusion matrix, and ROC curves to interpret model behavior.
- Compared L1 vs. L2 regularization and analyzed word-level influences on fake vs. real classification.
- Planned future extension using a fine-tuned BERT model to capture contextual semantic patterns.

Technologies

Languages: Python, C++, SQL

Technologies: TensorFlow, PyTorch, AWS, Docker

Applications: Microsoft Excel, Word, PowerPoint, Jupyter Notebook