

Ahamed Foisal

+971 56 804 7460 | ahamedfoisal@nyu.edu | [linkedin.com/in/ahamedfoisal](https://www.linkedin.com/in/ahamedfoisal) | github.com/ahamedfoisal

EDUCATION

New York University Abu Dhabi, Bachelor of Science

Abu Dhabi, United Arab Emirates

Major: Computer Science, Minor: Applied Mathematics

May 2026

Relevant Coursework: Applied Internet Technology, Machine Learning, Introduction to Data Science, Cognitive Computational Modeling

Study Away - **NYU Paris (Spring 2024), NYU New York (Fall 2024)**

TECHNICAL SKILLS

Languages: JavaScript, Python, C/C++, HTML/CSS, MATLAB, R

Frameworks: React, Node.js, Express, FastAPI, Next.js

Tools & DevOps: Anaconda, Markdown, Canva, Jira, NPM, Nodemon

Libraries: Matplotlib, NumPy, Pandas, TensorFlow, SciPy, Scikit-Learn, PyTorch, Keras, SQLite

Databased & Cloud: MySQL, PostgreSQL, SQLite, AWS (Lambda, S3), Vercel

SWE PROJECTS

Instagram Analysis Data Model (Lytport) | Next.js, React, OpenAI api, Facebook Graph API, SQL

[Github link](#) | [Website link](#)

- Designed and developed a full-stack web application to analyze Instagram profiles, tailored for content creators.
- Integrated Facebook Graph API to fetch real-time metrics and OpenAI GPT models to generate personalized insights and trend reports.
- Built interactive dashboards using React and Chart.js, visualizing key performance metrics like impressions and engagement.
- Optimized database structures for handling large datasets and historical tracking, ensuring efficient data retrieval.

Gender Bias in Professor Ratings | Python, Scikit-learn, Pandas, NumPy, Matplotlib

[Github link](#)

- Conducted statistical hypothesis testing (Permutation tests, Mann-Whitney U test, Cohen's d, Bootstrapping) to analyze gender bias in professor ratings.
- Developed linear and logistic regression models with VIF analysis and SMOTE, achieving $R^2 = 73.5\%$ and $AUC = 0.667$.
- Visualized findings with Matplotlib and Seaborn, leveraging correlation heatmaps and confidence intervals for interpretable insights.

RESEARCH EXPERIENCE

Leveraging Diffusion Models for Unsupervised Anomaly Detection in High-Dimensional Data | Data Science and AI Lab, NYU Abu Dhabi

- Designed and implemented a **diffusion-based anomaly detection framework**, enabling **unsupervised identification of rare patterns** without requiring labeled data.
- Evaluated model effectiveness using **MNIST, KDD Cup 1999**, and other datasets, achieving **high precision, recall, F1-score, and AUC** compared to baselines.

AI in Public Health Data Analysis | Clinical Artificial Intelligence Lab, NYU Abu Dhabi

- Developing **machine learning models** to analyze **electronic health records and medical imaging**, predicting patient deterioration and optimizing clinical decision-making.
- Integrating **multimodal healthcare data** to enhance **diagnostic accuracy and personalized treatment recommendations**.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

NYUAD Bangladeshi Student Association

Abu Dhabi, UAE

Secretary

January 2025 - Current

- Led a multicultural team to organize **high-impact cultural programs** for 100+ participants.
- Implemented effective budgeting and resource allocation for cost-efficient event execution.