Date: 30 October, 2025

To

The Admissions Committee

Department of Computer Science

Faculty of Engineering and Applied Sciences

University of Edinburgh

Old College, South Bridge

Edinburgh EH8 9YL, United Kingdom

Subject: Application for Admission to the Master of Science in Computer Science Program

Dear Members of the Admissions Committee,

I am writing to formally apply for admission to the Master of Science in Computer Science program at the University of Edinburgh for the academic year 2026–2027. I am Rafid Ahmed, a recent graduate in Computer Science and Engineering from the University of Information Technology and Sciences (UITS), Bangladesh. My academic training and research experience have inspired a deep commitment to advancing my knowledge in Artificial Intelligence, Machine Learning, and Data Analytics—fields in which your university holds global distinction.

Throughout my undergraduate studies, I demonstrated consistent academic excellence, graduating with a CGPA of 3.91 out of 4.00 and ranking among the top five students in my class. My coursework in Algorithms, Artificial Intelligence, and Machine Learning honed my analytical, technical, and logical reasoning abilities. For my final-year thesis, titled "Hybrid Neural Network Architecture for Real-Time Image Recognition," I designed and implemented a deep learning model combining convolutional and recurrent neural networks to enhance object recognition accuracy. The project strengthened my expertise in Python, TensorFlow, and PyTorch while deepening my research discipline and problem-solving capabilities.

Alongside academics, I served as a Teaching Assistant for undergraduate programming courses and completed an industry internship at BJIT Ltd., where I contributed to developing RESTful APIs for enterprise-level software systems. These experiences allowed me to apply theoretical knowledge to practical challenges and fostered leadership, adaptability, and teamwork—skills essential for advanced research.

I am particularly drawn to the University of Edinburgh's interdisciplinary approach to computing and its pioneering work in Artificial Intelligence and Data Science. The research conducted at the Institute for Adaptive and Neural Computation aligns directly with my academic goals, and I am eager to contribute to ongoing research initiatives under the supervision of esteemed faculty members.

I am confident that my academic record, research experience, and intellectual curiosity will enable me to make valuable contributions to your postgraduate community. I would be honored to continue my academic journey at the University of Edinburgh and uphold the institution's tradition of excellence in computing research and innovation.

Thank you very much for considering my application. I look forward to a favorable response.

Yours faithfully,

Rafid Ahmed

Email: rafid.ahmed@email.com

Phone: +8801XXXXXXXXX

LinkedIn: linkedin.com/in/rafidahmed

Dhaka, Bangladesh

CV of Rafid Ahmed

Rafid Ahmed

Email: rafid.ahmed@email.com | Phone: +8801XXXXXXXXX | LinkedIn: linkedin.com/in/rafidahmed

Address: Mirpur, Dhaka, Bangladesh

Career Objective

A highly motivated and academically accomplished Computer Science graduate seeking admission to the Master of Science in Computer Science program at the University of Edinburgh. My objective is to expand my research expertise in Artificial Intelligence, Machine Learning, and Data Analytics while contributing to innovative projects that integrate theoretical computing with real-world applications. I aspire to build a career as a research-oriented computer scientist dedicated to solving complex global challenges through intelligent systems and data-driven technologies.

Education

Bachelor of Science in Computer Science and Engineering (CSE)

University of Information Technology and Sciences (UITS), Dhaka, Bangladesh

Graduated: June 2025 | CGPA: 3.91 / 4.00

Key Courses: Artificial Intelligence, Data Structures and Algorithms, Machine Learning, Software Engineering, Database Systems, Computer Networks, Operating Systems, Data Mining, Compiler Design.

Undergraduate Thesis: "Hybrid Neural Network Architecture for Real-Time Image Recognition"

- Designed a hybrid deep learning model combining CNN and RNN architectures to enhance image recognition accuracy.

- Conducted data preprocessing using OpenCV and NumPy, achieving a 93% accuracy rate on multiple test datasets.

- Tools used: Python, TensorFlow, Keras, PyTorch, and Google Colab.

Research Experience

Undergraduate Research Assistant, AI and Data Science Laboratory, UITS

(January 2024 – May 2025)

- Collaborated with faculty and peers to develop predictive models for real-time traffic congestion analysis using supervised learning algorithms.

- Applied advanced data preprocessing, feature engineering, and visualization techniques using Pandas, Matplotlib, and Scikit-learn.

- Co-authored a paper titled "Predictive Modelling of Traffic Flow Using Supervised Learning Algorithms," currently under review in the *International Journal of Computing and Informatics.

Professional Experience

Software Engineering Intern, BJIT Ltd., Dhaka, Bangladesh

(January 2024 – April 2024)

- Participated in a team developing RESTful APIs for enterprise-level financial applications.

- Implemented back-end modules using Flask and integrated SQL databases for secure data handling.

- Enhanced system response time by 15% through optimized query execution and caching strategies.

Teaching Assistant, Department of Computer Science and Engineering, UITS

(August 2024 – December 2024)

- Assisted faculty in lab-based programming courses such as Programming with Python and Data Structures.

- Designed exercises, graded assignments, and mentored over 50 students on debugging and project development.

Technical Proficiencies

- Programming Languages:Python, C++, Java, JavaScript, SQL

- Frameworks & Libraries:TensorFlow, PyTorch, Keras, Flask, Django

- Databases: MySQL, MongoDB

- Tools & Platforms: Git, GitHub, Jupyter Notebook, Docker, Linux, AWS (basic)

- Specialized Skills:Data Visualization, Machine Learning Model Optimization, API Development, Cloud Deployment

Awards and Achievements

- Vice Chancellor's Merit Scholarship (2022–2025) – Awarded for outstanding academic performance.

- 2nd Place, UITS Inter-University Programming Contest 2024

- Top 10 Finalist, Bangladesh National Hackathon 2024

- Best Project Award, UITS TechFest 2023 for IoT-based Smart Waste Management System.

Selected Projects

1. AI Chatbot for Academic Queries – Developed an NLP-based chatbot using transformer models (Hugging Face) to assist university students.

2. Smart Waste Management System (IoT) – Created a real-time sensor-based monitoring system using Arduino and MQTT protocol.

3. E-Learning Web Application – Built a Django-based platform integrating courses, quizzes, and performance analytics.

4. Financial Transaction Tracker – Developed a secure Flask-based application with SQLAlchemy for transaction management.

Research Interests

Artificial Intelligence, Machine Learning, Deep Learning, Data Science, and Human–Computer Interaction.

Languages

- English – Advanced (IELTS Band 8 Equivalent)

- Bangla – Native

- Hindi – Intermediate

References

Dr. Nusrat Jahan

Associate Professor, Department of Computer Science and Engineering

University of Information Technology and Sciences (UITS), Dhaka

Email: nusrat.jahan@uits.edu.bd

Mr. Farhan Rahman

Software Engineer, BJIT Ltd., Dhaka

Email: farhan.rahman@bjit.com.bd