Farzad Ahmed

Ahsanullah University of Science and Technology

fahmed340gmu.edu https://farzad-1996.github.io

ResearchGate: https://www.researchgate.net/profile/Farzad-Ahmed

Github: https://github.com/Farzad-1996

Education

George Mason UniversityFairfax, VA, USA2nd-Year Ph.D. in Computer ScienceFall 2023 - Ongoing

Ahsanullah University of Science and Technology
B. Sc. in Computer Science and Engineering
Fall 2015 - Spring 2019

CGPA: 3.923 on a scale of $4.00(1^{st}$ in Merit Position)

Mastermind School Dhaka, Bangladesh

A levels 2013 - 2015

GPA: 5.00 on a scale of 5.00

Mastermind School Dhaka, Bangladesh

O levels 2013

GPA: 5.00 on a scale of 5.00

Research Interests

Machine Learning, Deep Learning, Natural Language Processing, Health Informatics

Publications

- Farzad Ahmed, Özlem Uzuner, Meliha Yetisgen and & Sungsoo Ray Hong "Advancing Sarcasm Detection with Large Language Models and Explainable AI". Submitted for publication (under review) in The 31st International Conference on Computational Linguistics, 2024
- Faisal Muhammad Shah, Sajib Kumar Saha Joy, Farzad Ahmed, Tonmoy Hossain, Mayeesha Humaira, Amit Saha Ami, Shimul Paul, Md Abidur Rahman Khan Jim & Sifat Ahmed. "A Comprehensive Survey of COVID-19 Detection Using Medical Images". Published in SN Computer Science A Springer Nature Journal, 2021
- o Farzad Ahmed, Samiha Sultana, Md Tanzim Reza, Sajib Kumar Saha Joy and Md. Golam Rabiul Alam "Interpretable Movie Review Analysis Using Machine Learning and Transformer Models Leveraging XAI". Published in IEEE Asia-Pacific Conference on Computer Science and Data Engineering 2022 (IEE CSDE 2022) Gold Coast, Australia)
- Sajib Kumar Saha Joy, Farzad Ahmed, Al Hasib Mahamud and Nibir Chandra Mandal "An Empirical Studies on How the Developers Discussed about Pandas Topics". Published in International Conference on Machine Intelligence and Emerging Technologies (MIET 2022), Noakhali, Bangladesh)

- Md Tanzim Reza, Farzad Ahmed, Shihab Sharar, Annajiat Alim Rasel "Interpretable Retinal Disease Classification from OCT Images Using Deep Neural Network and Explainable AI".
 Published in International Conference on Electronics, Communications and Information Technology 2021 (ICECIT 2021)
- Faisal M. Shah, Farzad Ahmed, Sajib Kumar Saha Joy, Sifat Ahmed, Samir Sadek, Rimon Shil and Md. Hasanul Kabir. "Early Depression Detection from Social Network Using Deep Learning Techniques". Published in 2020 IEEE Region 10 Symposium (TENSYMP), 5-7 June 2020, Dhaka, Bangladesh
- Noushin Afrin, Md Mahamudul Hasan, Mohammed Fazlay Elahi Safin, Khondakar Rifat Amin, Md Zahidul Haque, Farzad Ahmed, Md Tanvir Rouf Shawon. "Bengali License Plate Recognition: Unveiling Clarity with CNN and GFP-GAN". Published in 2023 26th International Conference on Computer and Information Technology (ICCIT) 13-15 December 2023, Cox's Bazaar, Bangladesh
- Aysha Gazi Mouri, Purnrndu Talukder, Tanvir Rahman Anik, Ifti Sam Ibn Rahman, Sajib Kumar Saha Joy, Md Tanvir Rouf Shawon, Farzad Ahmed, Nibir Chandra Mandal "An Empirical Study on Bengali News Headline Categorization Leveraging Different Machine Learning Techniques".
 Published in 2022 25th International Conference on Computer and Information Technology (ICCIT), Bangladesh
- MTR Shawon, GM Shibli, Farzad Ahmed, SKS Joy Farzad Ahmed, Nibir Chandra Mandal "Explainable cost-sensitive deep neural networks for brain tumor detection from brain mri images considering data imbalance". Submitted for publication (under review) in Multimedia Tools and Applications, A Springer Journal, 2024

Current Research

Medical Fact Checking

Experience

Graduate Research Assistant

Department of Computer Science George Mason University, Fairfax, VA, USA

Graduate Teaching Assistant

Department of Computer Science George Mason University, Fairfax, VA, USA

Lecturer

Department of Computer Science & Engineering

Ahsanullah University of Science and Technology, Dhaka, Bangladesh

Lecturer (Part Time)

Department of Computer Science & Engineering BRAC University, Dhaka, Bangladesh

January 2021 - August 2023

August 2023 - May 2024

May 2024 - Present

February 2020 - December 2020

Technical Skills

Languages: Python, C, C++, C#, JAVA, HTML5, PHP, XML, JavaScript, 80x86 Assembly

Framework: CSS, WebGL

Database: MySQL

Design Tools: Eclipse, NetBeans, Microsoft Visual Studio, PyCharm, Jupyter Notebook

Deep Learning Tools: Keras, Tensorflow, Pytorch

Others: PL/SQL, LaTeX

Awards & Achievements

• "Reached 150+ citations on my Google Scholar profile."

- o "Dean's List of Honor" (based on B.Sc. result)
- Certificate on Presentation at 2020 IEEE Region 10 Symposium (TENSYMP), 5-7 June 2020, Dhaka, Bangladesh
- Certificate for completing the courses "Neural Networks and Deep Learning" & "Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization" in Coursera
- Undergraduate admission sub-committee member of 3 consecutive semesters at Ahsanullah University of Science and Technology

Extracurricular Activities

- o Advisor of Cefalo CodeFiesta 2022: AUST Inter University Programming Contest
- \circ Organizer at ICCIT 2020: The 23^{rd} International Conference on Computer and Information Technology
- o Organizer of Intra-AUST Programming Contest Fall 2018