Sk. Tanzir MEHEDI

I Don't Believe In Magic





■ Tanzir?

- Excellent academic background and experiences in Machine Learning and security analysis of the autonomous applications using Blockchain & AI-enabled technology.
- Proven ability to work as an individual or a team member with minimal supervision.
- Highly motivated and eagerly interested in learning through the fulfillment of all commitments.

Educational Attainments

Mawlana Bhashani Science and Technology University, Bangladesh

M.Sc. (Engineering) in Information and Communication Technology

 ℰ http: www.mbstu.ac.bd
 CGPA

 ⊞ Class of 2019
 4.00 / 4.00

 ⊞ Result Published: July 15, 2023
 1st Position

Thesis Title: Privacy-Preserving and Dependable Deep Federated Learning-based Identification Model of New Infections

Mawlana Bhashani Science and Technology University, Bangladesh

B.Sc. (Engineering) in Information and Communication Technology

♦ http: www.mbstu.ac.bd
 ☐ Class of 2017
 ☐ Result Published: November 19, 2019
 CGPA
 3.93 / 4.00
 1st Position

Thesis Title: Dependable Intrusion Detection System for IoT : A Deep Transfer Learning-based Approach

Nhan Bahadur Ahsanullah College, Khulna, Bangladesh Khan

Higher Secondary Certificate Examination, Jashore Board

♦ http: www.kbagc.ac.bd
 ☐ Class of 2012
 GPA
 5.00 / 5.00

🕨 Moutala Secondary High School, Satkhira, Khulna, Bangladesh

Secondary School Certificate Examination, Jashore Board

♠ http: www.mhs.edu.bd
 ☐ Class of 2010
 ☐ GPA
 ☐ 5.00 / 5.00

Academic Experiences

2/'24- Sessional Academic ☑,

Present Department of Computer Science, Queensland University of Technology, Brisbane, Australia

- Conduct practical on IFB452 Blockchain Technology.
- Developed course materials for IFB452 Blockchain Technology.

1/'23-1/'24 Lecturer (Full-time) **2**,

Department of CSE, University of Asia Pacific, Dhaka, Bangladesh

- Conduct classes, labs, exams and evaluate students' lab, assignment as well as final answer scripts.
- Conducting undergraduate students' research with the aim of publications.

3/20-1/23 Lecturer (Full-time) \square ,

Department of IT, University of Information Technology and Sciences, Dhaka, Bangladesh

- Conducted classes and evaluated students' final answer scripts.
- Assisted in research activities and supervised undergraduate students working on the research.

Industrial Experiences

9/'19-12/'19 Data Analyst Engineer (Trainee) **Z**,

Fujitsu Research Institute, Tokyo, Japan

- I worked on several real-time machine learning projects.
- Lead a small team and work closely to support data scientists.

Research Experiences

1/'18-6/'19 Research Fellow (Part-time) ,

ICT Division, Dhaka, Bangladesh

- I worked on developing a privacy-preserving and dependable identification model for new infections from genome sequences.

Research Interests

I want to move forward myself to the research activities. It gives me immense pleasure, passion, and a realization as well when I go over in the research area of my interest

- Investigate and improve the security and privacy of autonomous applications using Blockchain & AI-enabled technology.

Publications

Journals

1. **S. T. Mehedi**, A. Anwar, Z. Rahman et al., "Dependable Intrusion Detection System for IoT: A Deep Transfer Learning-based Approach," *IEEE Transactions on Industrial Informatics*, vol. 19, no. 1, pp. 1006-1017, 2022.

DOI: 10.1109/TII.2022.3164770 - CrossRef ✓

2. **S. T. Mehedi**, A. Anwar, Z. Rahman et al., "Deep Transfer Learning-based Intrusion Detection System for Electric Vehicular Networks," *Sensors*, vol. 21, no. 14, pp. 4736, 2021.

DOI: 10.3390/s21144736 - CrossRef ✓

3. Z. Rahman, X. Yi, **S. T. Mehedi** et al., "Blockchain Applicability for the Internet of Things: Performance and Scalability Challenges and Solutions," *Electronics*, vol. 11, no. 2, pp. 1416, 2022.

DOI: 10.3390/electronics11091416 - CrossRef

4. **S. T. Mehedi**, K. Ahmed, F. M. Bui et al., "MLBioIGE: Integration and Interplay of Machine Learning and Bioinformatics Approach to Identify the Genetic Effect of SARS-COV-2 on Idiopathic Pulmonary Fibrosis Patients," *Biology Methods and Protocols*, vol. 7, no. 1, 2022.

DOI: 10.1093/biomethods/bpac013 - CrossRef

5. S. T. Mehedi, A. A. M. Shamim K. Ahmed et al. "Graphene Injected D-Shape Photonic Crystal Fiber for Nonlinear Optical Applications," *Silicon*, vol. 12, pp. 2293-2300, 2020.

DOI: 10.1007/s12633-019-00323-1 - CrossRef ✓

6. S. T. Mehedi, A. A. M. Shamim, M. B. A. Miah, "Blockchain-based Security Nanagement of IoT Infrastructure with Ethereum Transactions," *IJCS*, vol. 2, pp. 189-195, 2019.

DOI: 10.1007/s42044-019-00044-z - CrossRef ✓

7. M. Billah, **S. T. Mehedi**, A. Anwar et al., "A Systematic Literature Review on Blockchain Enabled Federated Learning Framework for Internet of Vehicles," *arXiv*, 2022.

DOI: 10.48550/arXiv.2203.05192 - CrossRef

Conferences

1. J. Ferdows, **S. T. Mehedi**, A. S. M. Hossain et al., "A Comprehensive Study of IoT Application Layer Security Management," *IEEE International Conference for Innovation in Technology (INOCON)*, pp. 1-7, 2020.

DOI: 10.1109/INOCON50539.2020.9298245 - CrossRef ☑

Book Chapters

 A. A. Sefat, G. M. R. I. Rasiq, S. T. Mehedi, "CPU Performance Prediction Using Various Regression Algorithms," Proceedings of International Conference on Machine Intelligence and Data Science Applications, Algorithms for Intelligent Systems, Springer, Singapore, pp. 163-171, 2021.

DOI: 10.1007/978-981-33-4087-9_14 - CrossRef**∠**

Technical Skills



Research LaTeX, Git, Google Colab, Jupyter Notebook, Diagram, Zotero, MATLAB, Turnitin, Mendeley, Tools Researchrabbit, Canva, Connectedpaper, Typeset

Completed Projects



Details Projects Details and Another Projects

Professional Affiliation

IEEE-R10 Member, The Institute of Electrical and Electronics Engineers (IEEE)
Member Number: 94893789 (2016-Present)

Leading Skills

UAP PCC Convener, UAP Programming Contest Club, 2023

IEEE SB Chair at IEEE MBSTU Student Branch, 2019

IEEE SB Vice-Chair at IEEE MBSTU Student Branch, 2018

Language Skills

Bengali Native language

English IELTS: 7.0 (Speaking-7, Listening-7, Reading-8, and Writing-6.5)

Japanese Level: N5 (Ability to understand some basic Japanese Speaking, Reading, and Writing)

Scholarships, Awards and Prizes

Scholarship A full-funded scholarship by Queensland University of Technology Postgraduate Research Award (QUTPRA) and QUT HDR Tuition Fee Sponsorship, 2024

Award University Academic Genius Award, Mawlana Bhashani Science and Technology University, 2023

Certificate Coach, 2023 ICPC Asia Dhaka Regional Contest, BUBT, 2023

Award Best Trainer, Ethical Hacking and Cybersecurity in Power Sector, Operational Perspectives, Bangladesh Power Development Board, 2022

Certificate Coach, BUET Inter-University Programming Contest 2022, BUET CSE Fest, 2022

Award Best Coach, Cefalo CodeFiesta 2022: AUST Inter-University Programming Contest, 2022

Certificate Coach, 2022 ICPC Asia Dhaka Regional Contest, Green University of Bangladesh, 2022

Fellowship, ICT Division, Bangladesh - Government of The People's Republic of Bangladesh, 2020

Award Selected as one of the top 5 trainees among 50 IT Engineers, BHTPA and ICT Division, Bangladesh, Government of The People's Republic of Bangladesh, 2019

Scholarships Faulty of Engineering, Mawlana Bhashani Science and Technology University (MBSTU), B.Sc (Engg.) and M.Sc (Engg.) exams in every year from 2015 to 2020

Award Project Show (Best Innovative Idea) event at Digital Innovation Fairs, 2018

Certificate EEE Day Inter-University Project/Thesis Presentation, Bangladesh University of Engineering and Technology (BUET), 2018

Award Inter-University Programming Contest in the 1st MBSTU CSE Carnival, 2017

Certificate AB Bank - Islamic University of Technology (IUT) 8th ICT Fest Programming Contest, 2016

Memorandum Letter of Congratulatory, Science Olympiad Event by the Boson Science Olympiad, Tangail, 2015

Award Letter of Congratulatory for SSC Scholarship Result by Prothom Alo-Robi Award Ceremony, 2010

Research Profiles

Google Scholar ORCiD ResearchGate Portfolio



