Md. Ahsan Habib

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Career **Objective**

Skilled, knowledgeable, and qualified computer science PhD student interested in Blockchain and Quantum Computing. Seeking a challenging position to enrich my knowledge, skills, and abilities by solving real-life problems while being resourceful, innovative, and flexible.

Education

Tulane University, USA

PhD in Computer Science

Fall 2024 - Present

Research Area: Scaling Solutions in Blockchain System

Supervisor: Prof. Dr. Lu Peng

Khulna University of Engineering & Technology (KUET), Khulna, Bangladesh

MSc in Computer Science & Engineering

Jan 2021 - Mar 2023

CGPA: 3.92 out of 4.00

Thesis: A Study on a Blockchain-Based Secure Medical E-Record Sharing System

Supervisor: Prof. Dr. Kazi Md. Rokibul Alam

Mar 2016 - Mar 2020

BSc in Computer Science & Engineering

CGPA: **3.91** out of **4.00** (**2**nd place out of 121)

Thesis: Physarum-Inspired Bicycle Lane Network Design in Congested Mega City

Supervisor: Prof. Dr. Muhammad Aminul Hague Akhand

Research **Interest**

Blockchain, Applied Cryptography, Security & Privacy, Post-Quantum Cryptography, Cyber Security, Quantum-Secured Blockchain.

Publication 2023

- 1. M. A. Habib and M. M. H. Manik, "A technique to avoid Blockchain Denial of Service (BDoS) and Selfish Mining Attack," 5th International Conference on Blockchain Computing and Applications (5th BCCA), IEEE, Kuwait, 2023. DOI: 10.1109/BCCA58897.2023.10338881
- 2. S. Hasan, M. A. Habib, A. Roy, and A. T. M. Shifat, "Sociala: A Incentivized Decentralized Social media for Writers Based on Blockchain using modified Delegated Proof of Stake," 10th International Conference on Networking, Systems and Security (10th NSysS), ACM, Bangladesh, 2023. DOI: 10.1145/3629188.3629198
- 3. M. Ali, M. A. Habib, K. M. R. Alam, and Y. Morimoto, "Color Image Encryption based on Multiple Chaotic Maps and Substitution Box", 2nd International Conference on Big Data, IoT and Machine Learning (2nd BIM), Taylor and Francis, Bangladesh, 2023.
- 4. M. A. Habib, and M. M. H. Manik. Blockchain-Enabled Secure Land Record Management System with a new Lightweight Cryptosystem based on Hybrid Chaotic Map," Blockchain: Research and *Applications*, Elsevier, 2023 (under review). (Q1)
- 5. A. T. M. Shifat, M. A. Habib, S. Hasan and A. Roy, "QEdu: A Quantum-Safe Blockchain Framework to Secure and Verify Educational Credentials," 26th International Conference on Computer and Information Technology (26th ICCIT), IEEE, Bangladesh, 2023 (accepted). (Rank - C)
- 6. M. N. T. Akhand, M. A. Habib, and K. M. R. Alam, "Analyzing Cryptocurrency Price Trends for Real-Time Price Predictions," 26th International Conference on Computer and Information Technology (26th ICCIT), IEEE, Bangladesh, 2023 (accepted). (Rank - C)
- 7. M. M. H. Manik, A. Sagor, M. A. Habib, M. M. Touhid, T. Ahmed, M. Z. Islam, and F. Haque, "Redefining Crime Record Storage: An Advanced Architecture Harnessing the Power of Blockchain Technology," 26th International Conference on Computer and Information Technology (26th ICCIT), IEEE, Bangladesh, 2023 (accepted). (Rank - C)
- 8. A. Roy, M. A. Habib, S. Hasan, and A. T. M. Shifat "A Scalable Cross-Border Payment System based on Consortium Blockchain Ensuring Auditability," 6th International Conference on Electrical Information and Communication Technology (6th EICT), IEEE, Bangladesh, 2023 (accepted).

- 9. M. T. Hasan, M. A. Habib, K. M. R. Alam, and M. N. Razzaque, "Data Trading System Using Blockchain and Oracle Network." 6th International Conference on Electrical Information and Communication Technology (6th EICT), IEEE, Bangladesh, 2023 (accepted).
- 10. M. N. Razzaque, K. M. R. Alam, M. A. Habib and M. T. Hasan, "Revolutionizing E-Voting Security with Blockchain-Backed Decentralized Authorization," 6th International Conference on Electrical Information and Communication Technology (6th EICT), IEEE, Bangladesh, 2023 (accepted).
- 11. M. A. Habib, M. M. H. Manik and S. Zaman, "A Blockchain-based Technique to Prevent Grade Tampering: A University Perspective," 3rd International Conference on Electrical, Computer and Communication Engineering (3rd ECCE), IEEE, Bangladesh, 2023, pp. 1-6, DOI: 10.1109/ECCE57851.2023.10101502
- 12. M. A. Habib, K. M. R. Alam, and Y. Morimoto, "A Secure Medical Record Sharing Scheme Based on Blockchain and Two-fold Encryption," 25th International Conference on Computer and Information Technology (25th ICCIT), IEEE, Bangladesh, 2022, pp. 78-83. DOI: 10.1109/ICCIT57492.2022.10054827 (Rank - C)
- 13. M. S. Shahariar, P. Banik, and M. A. Habib, "A Secure Land Record Management System using Blockchain Technology," 25th International Conference on Computer and Information Technology (25th ICCIT), IEEE, Bangladesh, 2022, pp. 557-562. DOI: 10.1109/ICCIT57492.2022.10054925 (Rank - C)
- 14. M. M. Hossen Manik, F. Hague, M. M. A. Hashem, M. A. Habib, M. Zabirul Islam, and T. Ahmed, "A Hybrid Framework for Sentiment Analysis from Bangla Texts," 25th International Conference on Computer and Information Technology (25th ICCIT), IEEE, Bangladesh, 2022, pp. 517-522. DOI: 10.1109/ICCIT57492.2022.10054952 (Rank - C)
- 15. M. A. Habib, M. A. H. Akhand, and M. A. S. Kamal, "Emotion Recognition from Microblog Managing Emoticon with Text and Classifying using 1D CNN", Journal of Computer Science, vol. 18, no. 12, pp. 1170-1178, 2022. DOI: 10.3844/jcssp.2022.1170.1178 (Scopus)
- 16, A. C. Dhar, A. Roy, M. A. Habib, M. A. H. Akhand, and N. Siddique, "Transformer Deep Learning Model for **Bangla-English Machine Translation**," in Proc. of 2nd International Conference on Artificial Intelligence: Advances and Applications. Algorithms for Intelligent Systems (2nd ICAIAA), Springer, Singapore, 2022. DOI: 10.1007/978-981-16-6332-1 24
- 17. M. A. H. Akhand, M. A. Habib, M. A. S. Kamal, and N. Siddique, "Physarum-Inspired Bicycle Lane Network Design in a Congested Megacity," Applied Sciences, MDPI, vol. 11, no. 15: 6958, 2021. DOI: 10.3390/app11156958 (Web of Science, IF:2.7, Q2)
- 18. J. Islam, M. A. H. Akhand, M. A. Habib, M. A. S. Kamal, N. Siddique "Recognition of Emotion from Emoticon with Text in Microblog Using LSTM," Advances in Science, Technology and Engineering Systems Journal (ASTESI), vol. 6, no. 3, pp. 341-348, 2021. DOI: 10.25046/aj060340
- 19. M. B. Mredul, M. A. Habib, M. A. H. Akhand, and M. A. S. Kamal, "Network Repair Crew Scheduling Using Benders Decomposition Method: A Case Study of Dhaka City" in Proc. of International Conference on Information and Communication Technology for Sustainable Development (ICICT4SD), IEEE, Bangladesh, February 27-28, 2021. DOI: 10.1109/ICICT4SD50815.2021.9396831
- 20. M. A. Habib, M. M. Islam, M. N. Kabir, M. B. Mredul, and M. Hasan, "Staircase Detection System for Visually Impaired People: A Hybrid Approach," Revue d'Intelligence Artificielle", vol. 33, no. 5, pp. 327-334, 2019. DOI: 10.18280/ria.330501 (Scopus, Q3)
- 21. Md. Nakibul Alam, Md. Milon Islam, M. A. Habib, M. B. Mredul, "Staircase Detection Systems for the Visually Impaired People: A Review," International Journal of Computer Science and Information Security (*IJCSIS*), Vol. 16 No. 12, pp. 13-18, 2018.

Professional	Assistant Professor	Jun 2022 - Present		
Experience	Computer Science & Engineering, Khulna University of Engineering & Technology			
	Lecturer	Feb 2022 - Jun 2024		
	Computer Science & Engineering, Khulna University of Engineering & Technology			
	Lecturer	Oct 2020 – Jan 2022		
	Computer Science & Engineering, Green University of Bangladesh			
Arvanda 0	Post Paner Avierd 2rd ECCE 2022			

2022

2021

2019

2018

Scholarships	— University F	aculty De	an's Award, Session – 2015-16, 2016-17, 2017-18 and 2018-19.			
	Regional Champion (Khulna) & Global Nominee – NASA Space App Challenge 2019.					
Technical Skills	Language	C, C++, J	ava, Swift, Python, Assembly, PHP, JavaScript, HTML, CSS			
	IDE	Android Studio, Xcode (iOS), VS Code, Eclipse				
	DBMS	Oracle 10g, MySQL, SQLite				
	Others	Git, CISCO Packet Tracer, OpenCV, OpenGL				
Problem Solving	Handle : nay	an_082 (0	Codeforces, UVA, Vjudge), mdnayan1507082 (Leetcode) Total 350+ probl	em solved		
	Participated in Intra KUET Programming Contest, 2016 & 2019.					
Projects	Blockchain	aBC Tools: Kotlin, Firebase Description: A distributed application for exploring the Proof-of-Work based Blockchain system.				
		DeLTA Tools: Kotlin, Firebase Description: An decentralized land trading application based on Blockchain.				
	ML	Skincer Tools: Java, Firebase Description: A skin cancer detection mobile application.				
	AI	BeatMySum Tools: Python, AI Description: A human vs PC card game with minimax and alpha-beta pruning algorithm.				
	Graphics	CarDesign Tools: OpenGL, C++ Description: A classic project for computer graphics.				
	Compiler	sCompiler Tools: C++ Description: A simple compiler project.				
	iOS	Tic-Tac-Toe Tools: Swift Description: An iOS app of a well-known game.				
	Web	KUET Debating Society Website Tools: PHP, HTML, CSS, JavaScript Description: A website based on the working procedure of a Debating Society.				
	Android	Calculator Tools: Java Description: It's an android application for addition, subtraction, multiplication and division				
			larmMe Tools: Java, SQLite Description: It is an application for maintaining the daily class outine of a student.			
	Database	Bloodbank Tools: Oracle DBMS, PL/SQL Description: A simple Database project based on blood donation organization's workflow.				
	Hardware	Smart Stick Tools: Raspberry Pi Description: This project is to build a smart stick for visually impaired people that help to detect staircase				
Services	Professional Activities					
	Committee I		Int. Conf. on Electrical Information and Communication Technology (EICT			
	Program Coach	mmittee	Intra KUET Programming Contest (IKPC) ACM International Collegiate Programming Contest (ICPC)	202 202		
	Judge		BDApps	202		
	Mentor		CTO Forum	202		
	Program Co	mmittee	Intra KUET Programming Contest (IKPC)	202		
	Committee I Program Co		Int. Conf. on Electrical Information and Communication Technology (EICT Intra KUET Programming Contest (IKPC)	Γ) 202202		
	Institutional Activities (As Faculty)					
	Treasurer		CSE Association of KUET	2022-Presen		
	Moderator Moderator		Special Group Interested in Programming Contest (SGIPC) Hardware Acceleration Club of KUET (HACK)	2020-Present 2020-Present		
	Institutional Activities (As Student)					
	Member		CSE Association of KUET	2016-202		
	Vice Preside	nt	Hardware Acceleration Club of KUET (HACK)	2018-201		
	Member Member		Special Group Interested in Programming Contest (SGIPC) Hardware Acceleration Club of KUET (HACK)	2016-201 2016-201		
	Executive M	ember	Organization of KUET Sports (OKS)	2018-201		

Reference

Dr. Lu Peng

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