Md. Ahsan Habib

Lecturer, CSE, KUET | Khulna, Bangladesh +88 01773756759 | mahabib@cse.kuet.ac.bd







Career **Objective**

Skilled, knowledgeable, and qualified computer science graduate interested in cryptography and blockchain. Seeking a challenging Ph.D. position to enrich my knowledge, skills, and abilities by solving real-life problems while being resourceful, innovative, and flexible.

Education

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

M. Sc. in Computer Science & Engineering

Ian 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

B. Sc. 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). (01)
- 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

Experience	Computer Science & Engineering, Khulna University of Engineering & Technology Lecturer Oct 2020 – Jan 2022			
Professional	Lecturer Feb 2022 – Present			
2018	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.			
2019	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)			
	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" <i>in</i> Proc. of International Conference on Information and Communication Technology for Sustainable Development (<i>ICICT4SD</i>), IEEE, Bangladesh, February 27-28, 2021. DOI: 10.1109/ICICT4SD50815.2021.9396831			
	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 (<i>ASTESJ</i>), vol. 6, no. 3, pp. 341-348, 2021. DOI: 10.25046/aj060340			
2021	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 ," <i>Applied Sciences</i> , MDPI, vol. 11, no. 15: 6958, 2021. DOI: 10.3390/app11156958 (<i>Web of Science, IF:2.7, Q2</i>)			
	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 2 nd International Conference on Artificial Intelligence: Advances and Applications. Algorithms for Intelligent Systems (2 nd ICAIAA), Springer, Singapore, 2022. DOI: 10.1007/978-981-16-6332-1 24			
	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)			
	14. M. M. Hossen Manik, F. Haque, 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)			
	13. M. S. Shahariar, P. Banik, and M. A. Habib , " A Secure Land Record Management System using Blockchain Technology ," 25 th International Conference on Computer and Information Technology (25 th <i>ICCIT</i>), IEEE, Bangladesh, 2022, pp. 557-562. DOI: 10.1109/ICCIT57492.2022.10054925 (Rank - C)			
2022	 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) 			
	11. M. A. Habib , M. M. H. Manik and S. Zaman, " A Blockchain-based Technique to Prevent Grade Tampering: A University Perspective ," 3 rd International Conference on Electrical, Computer and Communication Engineering (3 rd ECCE), IEEE, Bangladesh, 2023, pp. 1-6. DOI: 10.1109/ECCE57851.2023.10101502			

Technical	

Skills

Awards & Scholarships

Best Paper Award, 3rd ECCE 2023.

University Faculty Dean's Award, Session – 2015-16, 2016-17, 2017-18 and 2018-19. Regional Champion (Khulna) & Global Nominee – NASA Space App Challenge 2019.

Language C, C++, Java, Swift, Python, Assembly, PHP, JavaScript, HTML, CSS

 $Computer\ Science\ \&\ Engineering,\ Green\ University\ of\ Bangladesh$

IDE Android Studio, Xcode (iOS), VS Code, Eclipse

DBMS Oracle 10g, MySQL, SQLite

	Others	Git, CISC	O Packet Tracer, OpenCV, OpenGL				
Problem Solving	Handle: nayan_082 (Codeforces, UVA, Vjudge), mdnayan1507082 (Leetcode) Total 350+ problem solved						
	Participated	in Intra K	UET Programming Contest, 2016 & 2019.				
Projects	Blockchain	aBC Tools: Kotlin, Firebase Description: A distributed application for exploring the Proof-own Work based Blockchain system.					
		DeLTA Blockcha	LTA Tools: Kotlin, Firebase Description: An decentralized land trading application based on ckchain.				
	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					
			Me Tools: Java, SQLite Description: It is an application for maintaining the daily class e of a student.				
	Database	Bloodbank Tools: Oracle DBMS, PL/SQL Description: A simple Database project based on blood donation organization's workflow.					
	Hardware		$oldsymbol{tick}$ Tools: Raspberry Pi Description: This project is to build a smart stick people that help to detect staircase	ck for visually			
Services	Professional Activities						
	Committee N		Int. Conf. on Electrical Information and Communication Technology (EIC	-			
	Program Cor	nmittee	Intra KUET Programming Contest (IKPC)	2023			
	Coach		ACM International Collegiate Programming Contest (ICPC)	2023			
	Judge		BDApps	2022			
	Mentor		CTO Forum	2022			
	Committee N		Intra KUET Programming Contest (IKPC)	2022			
	Program Cor		Int. Conf. on Electrical Information and Communication Technology (EIC Intra KUET Programming Contest (IKPC)	Γ) 2021 2021			
	Institutional Activities (As Faculty)						
	Treasurer		CSE Association of KUET	2022-Present			
	Moderator		Special Group Interested in Programming Contest (SGIPC)	2020-Present			
	Moderator		Hardware Acceleration Club of KUET (HACK)	2020-Present			
	Institutional Activities (As Student)						
	Member		CSE Association of KUET	2016-2020			
	Vice President		Hardware Acceleration Club of KUET (HACK)	2018-2019			
	Member Member		Special Group Interested in Programming Contest (SGIPC) Hardware Acceleration Club of KUET (HACK)	2016-2019 2016-2017			
	Executive Member Organizer		Organization of KUET Sports (OKS) National High School Programming Contest (NHSPC)	2018-2019 2017			

Reference Dr. Kazi Md. Rokibul Alam

Professor, Department of Computer Science and Engineering

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