

K.M. TOUSIF BIN PARVES

CURRICULUM VITAE

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tousifo.github.io | GitHub | LinkedIn | ResearchGate

Career Objective

Seeking an academic position in Computer Science, Information and Communication Engineering, Information and Communication Technology, or a related discipline, where I can contribute through OBE-based teaching, student mentoring, project supervision, and research in AI, quantum machine learning, IoT, embedded systems, and robotics.

Education

Master of Science (Engineering) Information and Communication Technology, Comilla University, Cumilla CGPA: 3.94 Session: 2023–24 Result published: 2026	2025–Present
Bachelor of Science (Engineering) Information and Communication Technology, Comilla University, Cumilla CGPA: 3.67/4.00 Session: 2019–20 Result published: 2025	2020–2025
Higher Secondary Certificate (Science) Govt. Science College, Dhaka GPA: 4.42/5.00 Passing year: 2019	2017–2019
Secondary School Certificate (Science) Motijheel Model School & College, Dhaka GPA: 5.00/5.00 Passing year: 2016	2014–2016

Work Experience

Sep 2025–Present	Lecturer, Department of Computer Science and Engineering Port City International University Teaching undergraduate courses, preparing assessments, supervising projects, supporting OBE activities, and mentoring students.
Jul 2023–Aug 2025	Research Assistant, Quantum Machine Learning Lab Department of ICT, Comilla University Researched quantum computing, ML/DL, hybrid models, algorithms, data preparation, and evaluation using Python, PyTorch, PennyLane, Colab, and Kaggle.
2024–2025	Co-Founder RoboICT Built a hands-on robotics and programming education platform for school and college students.
2022–2023 Part-time	Robotics & Programming Instructor School of Robotics, Cumilla Taught C, Python, Arduino, embedded systems, and robotics to learners aged 8–50.

Academic and Teaching Profile

Teaching areas	Data Structures, Algorithms, Database Systems, Web Technologies, AI/ML, Robotics, Embedded Systems, IoT, and Research Methodology.
OBE	Course-outcome design, constructive alignment, learning activities, assessment, evaluation, and feedback.
Interdisciplinary	ICT background spanning computing, intelligent systems, embedded platforms, IoT, robotics, and data-driven engineering.
Research interests	Quantum ML security, medical and explainable AI, backdoor detection and repair, hybrid QNNs, IoT, robotics, and intelligent systems.

Research Publications and Scholarly Outputs

Journal	Harnessing Artificial Intelligence to Strengthen Green Innovation Capacity in Pursuit of Sustainable Development Goals: Evidence from Taiwan's Manufacturing Sector. <i>Equilibrium: Quarterly Journal of Economics and Economic Policy.</i> SJR Q1 (Economics); ESCI indexed. DOI: 10.24136/eq.3748
Journal	Explainable Stacked Ensemble Learning for Fake News Detection using Text and Metadata. <i>Jurnal The Messenger</i> , 2026. Web of Science indexed. DOI: 10.26623/themessenger.v18i1.16007
Conference	Garbage Monitoring System with Rewarding Mechanism Using IoT Devices Like ESP32, ESP32CAM, RFID Module. <i>ICMRS 2026</i> , Comilla University, Bangladesh. Corresponding Author.
IEEE Conference	Diabetes Prediction with Explainable AI: A Stacking Ensemble Approach for Better Accuracy and Interpretability. <i>QPAIN 2025</i> , pp. 1–6. DOI: 10.1109/QPAIN66474.2025.11172244 Supervisor: Md. Rakib Hasan, Comilla University.
Under review	Academic Assistant: A Robotic System Powered by Retrieval-Augmented Generation and Fine-Tuned LLMs for Interactive Learning. Journal manuscript under review. Supervisor: Dr. Dulal Chakraborty, Comilla University.
M.Sc. thesis Defended	QMedShield: Quantum Measurement-Guided Detection, Explanation, and Repair of Backdoor Attacks in Multiclass Medical Hybrid QNNs. M.Sc. (Engineering), Comilla University. Supervisor: Dr. Dulal Chakraborty.

Selected Projects

2022	Robot Niko – 3D-Printed Humanoid Robot Autonomous navigation, human detection, and conversational interaction. github.com/tousifo/Robot-Niko
2024	CoU Bus Tracker Live GPS tracking system for university buses; Champion, Innovation Project Showcase 2024. github.com/tousifo/University-Bus-Tracking-System

Technical, Academic, and Professional Skills

Programming Python, C, C++, SQL, HTML/CSS	Embedded / IoT Arduino, ESP32, ESP32-CAM, RFID, Raspberry Pi
AI / ML PyTorch, TensorFlow/Keras, Scikit-learn, SHAP	Tools Git, Docker, MLflow, Flask, LangChain, Colab, Kaggle
Quantum ML PennyLane, Qiskit, VQCs, hybrid QNNs, QXAI	Academic OBE, mentoring, assessment, project supervision
Data / Vision Pandas, NumPy, OpenCV, ResNet-based pipelines	Languages Bangla native, English advanced

Scholarships and Achievements

Jun 2019	Recipient of the MetLife Foundation Pathways Scholarship Program .
2024	Champion, Innovation Project Showcase – University Bus Tracker.
2024	Champion, Science Project Showcasing – 2nd CoUSC National Science Festival.
2023	Runners-up, Line Follower Robot Competition (BAIUST EEE Day '23).
2020–21	1st Runner-up, Hult Prize Comilla University 2020–21 – South-East Asia Region Finalist.
2020	Special Mention, NSTU National MUN 2020 – Delegate of Spain, Committee of International Energy Agency.

Training and Certifications

2025	Training on Outcome-Based Education (OBE) Curriculum Port City International University, Chattogram Two-day workshop on OBE, outcome design, assessment alignment, and constructive alignment.
2023–2024	Data Science, Machine Learning & MLOps Bootcamp Bongodev Six-month bootcamp in ML, deep learning, MLOps, TensorFlow/Keras, MLflow, Docker, and Flask.
2024–25	Quantum Computing with Machine Learning Mahdy’s Research Academy Six-month course on quantum algorithms, circuits, Qiskit, and hybrid quantum-classical ML.

Volunteer and Leadership Experience

2023	Co-organizer, TEDx CoU Comilla University Co-organized Comilla University’s first TEDx-licensed conference.
2024–2025	General Secretary, CoU IT Society Comilla University Partnered with DataCamp; organized a national IT Fest and industrial tour.
2024–2025	President, Rotaract Club of Comilla Shining Star Cumilla

References

Available upon request.