

RABAB KHAN RONGON

Dhaka-1360, Bangladesh || rababrongon@gmail.com || (+880) 1760 533424

[Personal Website](#) || [ResearchGate](#) || [LinkedIn](#)



RESEARCH INTEREST

Human Computer Interaction, Artificial Intelligence, Machine Learning, Software Engineering.

ACADEMIC CREDENTIALS

M.Sc. MIST – Military Institute of Science and Technology *April 2024 - Continuing*

Department: Computer Science and Engineering || Major: Artificial Intelligence || CGPA: 3.50

Selected Course Work: Advanced AI, Advanced ML, Neural Networks, Data Mining, Fuzzy Logic, HCI

B.Sc. IUBAT – International University of Business Agriculture and Technology *January 2024*

Department: Computer Science and Engineering || CGPA: 3.21 out of 4.00 (81%)

Selected Course Work: OOP in C++, Data Structure & Algorithm, DBMS, Software Engineering, System Design, Theory of Computation, Computer Architecture, Operating Systems, Micro-processor.

PUBLICATIONS

Undergraduate Thesis

[1] **Implementation of Energy Efficiency Cloud Data Center Architecture Model using Green Cloud Simulator for National Data Center of Bangladesh**

Supervised by: Krishna Das

Journal Paper

[2] **Rabab Khan Rongon, Krishna Das, “An Energy Efficient Cloud Data Center Architectural Model for the National Data Center of Bangladesh”** in "Journal of Discrete Mathematical Sciences and Cryptography", Volume 27, Issue 6, Page 1905-1917 (Scopus Indexed Q1 Quartile, Cite Score: 3.1)

[3] M.A Eti, **Rabab Khan Rongon**, “*Investigating tRNA-Derived Small RNA Expression Patterns and Bioinformatics Analysis in Epicardial Fat of Atrial Fibrillation Patients*” in International Journal for Research in Applied Science and Engineering Technology (IF: 7.538)

Book Chapter

[4] A. Islam, S. Zaman, **Rabab Khan Rongon**, S.T. Sharif, H. Jahan, “*An Attention-Driven Deep Learning Model for Predicting Human Life Expectancy*” in 3rd International Conference on Big Data, IoT and Machine Learning (BIM 2025). (In Press)

Conference Paper

[5] **Rabab Khan Rongon, Krishna Das**, “*Obstacle for implementing sustainable computing in Bangladesh and approach to being sustainable through green cloud computing methodology*” in 4th International Conference on Sustainable Computing and Management (SUSCOM-2022) Aug. 23-24, 2022.

[6] **Rabab Khan Rongon**, M. Akhteruzzaman, S.T. Sharif, K. Das, “*Analyzing Risk Level from RoI and VoI for Robust Data Privacy using Fuzzy Inference System*” in “IEEE 4th International Conference on Robotics, Electrical and Signal Processing Techniques 2025”

[7] **Rabab Khan Rongon**, S.K. Prangon, K.Das, S.T. Sharif, A. Ashraf, “*Evaluating the Accessibility of Online Pharmacies' Mobile Applications in Bangladesh using Heuristic and Semiotic Analysis*” in 2025 IEEE International Conference on Quantum Photonics, Artificial Intelligence, and Networking

[8] **Rabab Khan Rongon**, S.K. Prangon, K.Das, S.T. Sharif, A. Ashraf, “*Improving CAPTCHA Systems for Better Usability and Accessibility in Mobile Applications*” in IEEE 2nd International Conference on Computing, Applications, and Systems. (Accepted)

MANUSCRIPTS UNDER REVIEW

[8] *Enhancing Maritime Fuel-use Efficiency and Reduction of Carbon Emission: An Experiment with Deep Reinforcement Learning Agent* – under review Gazi University Journal of Science.

[9] *Energy-Aware Data Center Management: A Sustainable Approach to Reducing Carbon Footprint* – under review in Next Energy (Science Direct; Cite Score: 1.3).

[10] *A Real-Time Automated Traffic Violations Detection System for Motorcycles Using YOLOR* – under review for the 4th IEEE International Conference on Robotics, Automation, AI and Internet-of-Things.

[11] *Deep Learning-Based Recognition of Bangla Sign Language Gestures with CNN, VGG16, and MobileNet* – under review for the IEEE Conference on Biomedical Engineering, Computer and Information Technology for Health 2025

[12] *Predicting Renewable Energy Usage in Bangladesh Using Environmental and Climatic Indicators: A District-Level Analysis* - under review for the 28th IEEE International Conference on Computer and Information Technology

PROFESSIONAL EXPERIENCE

AskTuring AI <i>Applied AI Test Engineer III</i>	July 2025 – Present
Agency Handy <i>Software Engineer II, QA</i>	Aug 2023 – July 2025
Onethread Technologies Limited <i>Software Engineer, QA</i>	Feb 2022 – July 2023

RESEARCH EXPERIENCE

Miyan Research Institute, IUBAT <i>RA – Research Assistant</i>	Jan 2024 – Oct 2024
---	---------------------

TEACHING EXPERIENCE

IUBAT- International University of Business Agriculture and Technology <i>Department of Computer Science and Engineering</i> TA – Teaching Assistant of Fundamentals of Electronics	<i>Feb 2021 – July 2022</i>
Solution Center of Science and Mathematics Founder and Senior Instructor of ICT	<i>Feb 2019 – Feb 2022</i>

PROFESSIONAL CERTIFICATION

● Prompt Engineering for ChatGPT, Vanderbilt University ☑	<i>July, 2023</i>
● Google Analytics for Beginners, Google Analytics Academy ☑	<i>April, 2021</i>
● Introduction to Cloud Computing, IBM ☑	<i>June, 2021</i>
● Technical Support Fundamentals, Google ☑	<i>June, 2022</i>

TECHNICAL SKILLS

- **Programming & Scripting Languages:** Python, C++, MATLAB, SQL
- **Machine Learning & Data Mining:** scikit-learn, pandas, NumPy, TensorFlow.
- **Research & Simulation Tools:** MATLAB, Green Cloud Simulator, CloudSim, NS2
- **Data Visualization & Analytics:** Power BI, Excel, Google Data Studio, Python Visualization Libraries
- **UX & Accessibility Evaluation:** Heuristic Evaluation, Semiotic Analysis, UX Audits, Figma.
- **Automation & Quality Assurance:** Selenium, Postman, REST Assured, Swagger.
- **Cloud & Database Technologies:** MySQL, MongoDB, AWS (basic)
- **Version Control & DevOps:** Git, GitHub, Jenkins (CI/CD)
- **Academic Writing & Reference Tools:** LaTeX, Overleaf, Microsoft Office
- **Entrepreneurship:** Market Research, Software Deployment, Managing Agile Team

SCHOLARSHIPS

● Professor Mahmuda Khanam Scholarship: For Academic performance at IUBAT	<i>Fall 2020</i>
● RL (Bob) Southern Scholarship: For Academic performance at IUBAT	<i>Summer 2021</i>
● Undergraduate Research Publication Grant from Miyan Research Institute, IUBAT	<i>Fall 2024</i>

PROFESSIONAL AFFILIATIONS

● IEEE, Graduate Student Member	<i>June 2025 – Present</i>
● IUBAT IT Society, IT Mentor	<i>May 2020 – Dec 2023</i>
● Imperial College Science Club, Vice President of Project and Publication	<i>Feb 2017 – Jan 2018</i>