
HABIBOR RAHMAN RABBY

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Computer Science researcher specializing in Machine Learning and Natural Language Processing, with a strong focus on predictive modeling, time-series forecasting, and data-driven risk assessment. Published peer-reviewed research in IEEE-indexed international conferences and academic journals. Actively involved in academic peer review and technical program committee service. Research interests emphasize scalable, interpretable, and societally impactful AI solutions.

Research Interest

Machine Learning, Deep Learning, Natural Language Processing (NLP), Predictive Modeling, Time-Series Forecasting, Data Analysis, Sentiment Analysis, Text Classification, Explainable Artificial Intelligence (XAI), Statistical Modeling, Risk Prediction, Model Optimization.

Publications

- **Habibor Rahman Rabby**, Mahadi Hasan, Israt Jahan, Rumana Jahan, and Rafiuddin Siddiky. “Coronavirus Disease Outbreak Prediction and Analysis Using Machine Learning and Classical Time Series Forecasting Models.” In 2024 International Conference on Artificial Intelligence and Quantum Computation-Based Sensor Application (ICAIQSA), pp. 1–7. IEEE, 2024. DOI: <https://doi.org/10.1109/ICAIQSA64000.2024.10882176>
- **Habibor Rahman Rabby**, Israt Jahan, Mahadi Hasan, Rafiuddin Siddiky, and Rumana Jahan. “Comparative Analysis of Machine Learning Algorithms for Breast Cancer Prediction Using Fine Needle Aspirate Image Features.” In 2025 International Conference on Emerging Trends in Industry 4.0 Technologies (ICETI4T), pp. 1–7. IEEE, 2025. DOI: <https://doi.org/10.1109/ICETI4T63625.2025.11132221>
- Nusrat Yasmin Nadia, **Habibor Rahman Rabby**, Md Habibul Arif, Md Iftekhar Monzur Tanvir, Mumtahina Ahmed, and Sabiha Firdaus. “Scalable RNN-Based Transfer Learning for Patient Sentiment Monitoring in Telehealth Platforms.” In 2025 IEEE 2nd International Conference on Computing, Applications and Systems (COMPAS), 2025. DOI: <https://doi.org/10.1109/COMPAS67506.2025.11381638>
- Md Habibul Arif, **Habibor Rahman Rabby**, Nusrat Yasmin Nadia, Md Iftekhar Monzur Tanvir, and Abdullah Al Masum. “AI-Driven Risk Assessment in National Security Projects: Examining Machine Learning Models to Predict and Mitigate Risks in Defense and Critical Infrastructure Projects.” In Journal of Computer Science and Technology Studies, Vol. 7, No. 2, pp. 71–85, 2025. DOI: <https://doi.org/10.32996/jcsts.2025.7.2.6>
- **Habibor Rahman Rabby**, et al. “Digital Divide in the Homeless Population: Machine Learning Analysis of Technology Access and Usage Patterns in California, USA.” In Journal of Information Systems Engineering and Management, Vol. 10, No. 63s, pp. 1523–1539, 2025. DOI: <https://doi.org/10.52783/jisem.v10i63s.14171>

- Mahmuda, **Habibor Rahman Rabby**, et al. “Machine Learning-Driven AI Insights: Transforming Strategic Decision-making for U.S. Businesses.” In Cuestiones de Fisioterapia, Vol. 54, No. 5, 2025. DOI: <https://doi.org/10.48047/s3wy1048>
- Md Habibul Arif, **Habibor Rahman Rabby**, Nusrat Yasmin Nadia, Md Zahid Hassan, and Rasel Hossain Babu. “Machine Learning Models for Cybersecurity Risk Analysis in U.S. Critical Infrastructure Systems.” In Journal of Information Systems Engineering and Management, Vol. 11, No. 1s, 2025. DOI: <https://doi.org/10.52783/jisem.v11i1s.14284>
- Nusrat Yasmin Nadia, Md Habibul Arif, **Habibor Rahman Rabby**, Rasel Hossain Babu, and Md Zahid Hassan. “Security Analytics Using Machine Learning Methods for Federal Government Cloud Systems.” In Journal of Information Systems Engineering and Management, Vol. 11, No. 1s, 2025. DOI: <https://doi.org/10.52783/jisem.v11i1s.14285>

Research Metrics

- Total Publications: 8
- IEEE-indexed Conference Papers: 3
- Google Scholar Citations: 23+
- Journal Articles: 5

Editorial Roles

- **Editorial Board Member**
 - Journal name: Frontiers in Computer Science and Artificial Intelligence (FCSAI)

Academic Service

- **Technical Program Committee (TPC) Reviewer – FET’26 (IEEE International Conference)**
 - Conference name: Frontiers of Engineering & Emerging Technologies (FET’26)
 - Reviewer for peer-reviewed manuscripts in AI/ML and related tracks.
- **Technical Program Committee (TPC) Reviewer – 3ICT2025 (IEEE International Conference)**
 - Conference name: International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT2025)
 - Reviewer for peer-reviewed manuscripts in artificial intelligence, machine learning, and data analytics
- **Peer Reviewer – FCSAI (Journal)**
 - Journal Name: Frontiers in Computer Science and Artificial Intelligence
 - Reviewer for AI/ML/NLP and related tracks.

Education

10/2022 - 08/2024
KY, USA

Master of Science in Computer Science
Campbellsville University
• 3.90 / 4.00 CGPA

01/2017 - 03/2021
Chattogram,
Bangladesh

Bachelor of Science in Computer Science and Engineering
Port City International University
• 3.77 / 4.00 CGPA

Professional Experiences

- 05/2025 – Present
Upskill Consultancy
New York, USA
Full Stack Developer
 - Design, develop, and maintain both front-end and back-end components of web applications, ensuring seamless integration of user-facing elements with server-side logic for optimal functionality.
 - Collaborate with cross-functional teams in an agile environment to support the delivery of high-quality, scalable, and efficient software solutions that meet business and user needs.
- 09/2024 - 05/2025
ThothIT LLC
Texas, USA
Software Developer
 - Analyze, design, and develop computer programs based on user needs and project requirements, and oversee unit testing to ensure functionality and user-friendliness.
- 04/2021 - 08/2022
KITRIM Soft Limited
Chattogram, Bangladesh
Software Engineer
 - Work closely with product managers, designers, and QA engineers to understand user needs, define technical requirements, and deliver high-quality software on schedule.
 - Identify and resolve software defects, conduct unit and integration testing, and continuously refine code based on feedback, performance analysis, and evolving project goals.

Technical Skills

- **Programming:** Python, C, C++, Java
- **Database:** MySQL, SQL Server (SSMS), SQL Query
- **Research:** Prediction Model (Machine Learning), Sentiment Analysis
- **Web Technologies:** HTML, CSS, XML, PHP, JavaScript, Bootstrap Framework
- **Frameworks & Tools:** Jupyter Notebook, Git, PowerPoint, Word, Excel

Professional Membership

- **Institute of Electrical and Electronics Engineers (IEEE)**
 - Member ID: 97085927
- **Association for Computing Machinery (ACM)**
 - Member ID: 4576516
- **IEEE Young Professionals**
 - Certificate of Membership
- **American Association for the Advancement of Science (AAAS)**
 - Member ID: 61121403

Certifications

- **Research Paper Presenter – IEEE International Conferences**
 - ICETI4T 2025
- **Android Application Development**
 - ICT Division, Government of Bangladesh | *May 2018 - November 2018*

Activities and Honors

- Volunteering at Port City International University, Chattogram, Bangladesh | Sept 2017 - Jan 2019

- PCIU Hackathon Winner at Department of CSE, Port City International University | Nov 2018
- Game Development Workshop at AGAMiLabs Limited, Bangladesh | July 2018
- Android Mobile Application Contest at Noni SoftTech Institution, Bangladesh | June 2018

Linguistic Proficiency

- English (Fluent)
- Bangla (Native)
- Hindi (Conversational)