

Md. Mizanur Rahman

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 Mizan Rahman |  StrikingHour |  strking_hour |  Google Scholar

1925 N. 12th Street, Philadelphia, PA 19122

EDUCATION

- **Temple University** Fall 2026 - Present
Ph.D in Computer & Information Science
Supervisor: Dr. Yu Wang United States
- **Rajshahi University of Engineering and Technology** February 2020 - June 2025
Bachelor of Computer Science and Engineering Rajshahi, Bangladesh
 - GPA: 3.83/4.00 (9th out of 180)
- **Notre Dame Collage** May 2019
Higher Secondary Certificate Dhaka, Bangladesh
 - GPA: 5.00/5.00
- **Khwaja Yunus Ali Laboratory School & College** March 2017
Secondary School Certificate Sirajganj, Bangladesh
 - GPA: 5.00/5.00

PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PATENT, S=IN SUBMISSION, T=THESIS

- [J.1] (Accepted) *Md. Raisul Islam Rifat, Md. Mizanur Rahman, Md. Abdul Kader Nayon, Md Shawmoon Azad and M.R.C. Mahdy, "QSAC: Quantum-assisted Secure Audio Communication using Quantum Entanglement, Audio Steganography, and Classical Encryption", Engineering Science and Technology [Q1, IF: 5.4].*
 - Designed a novel scheme of secure audio communication by incorporating E-91 Quantum Key Distribution with SHA-3 Hashing Algorithm, ChaCha20-Poly1305 AEAD and LSB steganography.
- [J.2] (Under Review) *Md. Mizanur Rahman, "Detection of Hallucination in Multimodal Large Language Models Across the Modalities: A Comprehensive Review", Frontiers in Artificial Intelligence.*
 - Reviewed hallucination metrics and benchmarks in MLLMs across the text, image, audio and video modalities.

TEACHING EXPERIENCE

- **Graduate Student Researcher** August 2026 - Present
Temple University
- **Graduate Teaching Assistant** August 2026 - Present
Temple University
 - CIS 1057: Programming in C
- **Lecturer, Department of Computer Science and Engineering** September 2025 - June 2026
Dhaka International University Dhaka, Bangladesh
 - **Courses:** Parallel and Distributed Processing, Database Management Systems, Software Engineering, E-Commerce and Web Engineering, and Information System Management.

PROJECTS

- **Build Large Language Model from Scratch** 2025

 - Developed a GPT-like LLM from scratch with the help of the Book titled Build Large Language Model (From Scratch) by Sebastian Raschka
- **Hands on Large Language Model** 2023

 - Text Classification: Classified text with both representative and generative models
 - Text Clustering and Topic Modeling: Clustered documents using a wide variety of language models.
- **Micrograd: A tiny Autograd engine** 2025

 - Developed Micrograd, which implements backpropagation (reverse-mode autodiff) over a dynamically built DAG and a small neural network library on top of it with a PyTorch-like API.
- **Simulation of a 5-bit CPU in Digital Simulator and Verification of Its Correctness Using Sample Code Stored in ROM** 2024

 - A 5-bit CPU was simulated using a digital simulator and verified by executing sample code stored in ROM. The CPU supports OR, ADD, and SHR operations, with 5 registers, a 10-word RAM (15-bit word size), and instructions including register-based, immediate, and branching (JMP, JL).

SKILLS

- **Programming Languages:** Python, C, C++, Java, C#, SQL, Verilog, Assembly.
- **Quantum Computing:** Qiskit, PennyLane; Quantum Key Distribution (BB84, B92, E91), Quantum Circuits, Entanglement, Circuit Cutting, and Distributed Quantum Computing.
- **Machine Learning & LLMs:** PyTorch, TensorFlow, NumPy, Pandas, Matplotlib; Large Language Models, Transformer Architectures, Text Classification, Clustering, and Topic Modeling.
- **Databases:** MySQL, PostgreSQL.
- **Development & Research Tools:** Git, GitHub, VS Code, CLion, Jupyter Notebook, Google Colab, $\text{\LaTeX}$ /Overleaf, Docker.
- **Platforms:** Linux, Windows.
- **Natural Languages:** Bengali (Native), English (Professional Proficiency).

REFERENCES

Dr. Yu Wang

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Dr. Mahdy Rahman Chowdhury

Associate Professor

Department of Electrical & Computer Engineering

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