Aisha B Rahman

Graduate Research Assistant

The University of New Mexico, Dept. of Electrical and Computer Engineering, Albuquerque, NM 87131, USA

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Education

Ph.D. Candidate, Department of Electrical and Computer Engineering
THE UNIVERSITY OF NEW MEXICO

Albuquerque, NM, USA
Jan. 2022 - Present

- **Laboratory:** Performance and Resource Optimization Lab **(PROTON LAB)**
- **Major Field Program:** Computer Engineering
- **Research Specialization:** Game Theory, Wireless Communication and Networks, Resource Allocation and Management, Network Security, Network Economics
- **Advisor:** Dr. Eirini Eleni Tsiropoulou
- **Current GPA:** 4.33/4.00

Master of Science (MSc) in Electrical and Electronic Engineering
UNIVERSITY OF CHITTAGONG

Chattogram, Bangladesh
Jan. 2019 - Dec. 2021

- **Laboratory:** Wireless Emerging Technology Lab **(WET LAB)**
- **Major Field:** Wireless Communication
- **Advisor**: Dr. Md. Fazlul Kader
- **MSc Thesis Title:** Best Relay Aided Energy Harvesting in a Multi-Relay Cooperative Network: A New Energy Harvesting Scheme
- **GPA:** 3.64/ 4.00

Bachelor of Science (BSc) in Electrical & Electronic Engineering
UNIVERSITY OF CHITTAGONG

Chattogram, Bangladesh
Jan. 2015- Dec. 2018

- **Major Field:** Wireless Communication
- **Project:** Bridge Strength Preservation by Automatic Traffic Density Control: an IoT Application
  Advisor: Ariful Islam
- **GPA:** 3.68/ 4.00

Work & Research Experience

Research Assistant
Performance and Resource Optimization Lab **(PROTON LAB)**
University of New Mexico

Albuquerque, NM, USA
May 2022 - Present

- Game Theory
- Network Economics
- Wireless Networks
- Reinforcement Learning

Teaching Assistant
University of New Mexico

Albuquerque, NM, USA
Jan. 2022- May 2022

- ECE-440 Introduction to Computer Networks
- ECE-524 Network Economics

Research Assistant
Wireless Emerging Technology Lab **(WET LAB)**
Universty of Chittagong

Chattogram, Bangladesh
May 2019 - Feb . 2021

- Wireless Communication
- Internet of Things (IoT)
- Simultaneous Wireless Information and Power Transmission
- Energy Harvesting

Volunteering Experience

Chair, IEEE Albuquerque Women in Engineering Affinity Group
Organizing and conducting monthly public talks, workshops, and other volunteering activities for promoting women engineers and scientists.

Albuquerque, NM, USA
Feb. 2022 - Present

Skills

Programming Languages	Python, MATLAB, C
Software Tools	MATLAB, Anaconda, Arduino-IDE, PSPICE, OpenAI Gym
Embedded Skills	Arduino series, Microcontrollers

Publications

Conferences

1. Siraj, M. S., **Rahman, A. B.,** Diamanti, M., Tsiropoulou, E. E., Papavassiliou, S., & Plusquelic, J., "Positioning, Navigation, and Timing enabled by Reconfigurable Intelligent Surfaces, Phase Shift Optimization, and Reinforcement Learning", IEEE MILCOM, 2022. (Accepted)
2. **Rahman, A. B.,** Siraj, M. S., Kubiak, N., Tsiropoulou, E. E., & Papavassiliou, S., "Network Economics-based Crowdsourcing in Online Social Networks", IEEE GLOBCOM, 2022. (Accepted)
3. **Rahman, A. B.,** and Kader, M. F., "Best Relay Transmission Aided Energy Harvesting in a Multi Relay Cooperative Network," 2020 IEEE Region 10 Symposium (TENSYMP), 2020, pp. 106-109, doi: 10.1109/TENSYMP50017.2020.9230985.
4. **Rahman, A. B.,** Kamal, M.S., and Islam, A., "Bridge Strength Preservation by Automatic Traffic Density Control: an IoT Application," 2019 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT), 2019, pp. 1-5, doi: 10.1109/ICASERT.2019.8934520.

Journals

1. P. Khan et al., "Machine Learning and Deep Learning Approaches for Brain Disease Diagnosis: Principles and Recent Advances," in IEEE Access, vol. 9, pp. 37622-37655, 2021, doi: 10.1109/ACCESS.2021.3062484.

Honors & Awards

2022	IEEE GLOBECOM 2022 GCSN Technical Program Committee (TPC) Member	*Rio de Janeiro, Brazil*
2022	IEEE ISCC 2022 Technical Program Committee (TPC) Member	*Rhodes Island, Greece*
2021	Education Board Scholarship based on Merit during M. Sc. degree program, 2019 - 2021	*Chattogram, Bangladesh*
2018	**1st Position** in 1st APECE Project Competition, University of Chittagong **2nd Runners Up**, EDU Engineering Day, East Delta University Education Board Scholarship based on Merit during B. Sc. degree program, 2015 - 2018	*Chattogram, Bangladesh*
2009	General Grade Scholarship, Education Board Bangladesh	*Dhaka, Bangladesh*

References available upon request.