# 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.: Albuquerque, NM, USA

#### THE UNIVERSITY OF NEW MEXICO

· 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 Economics

• Advisor: Dr. Eirini Eleni Tsiropoulou (Personal Website)

• Current GPA: 4.33/4.00

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

Laboratory: Wireless Emerging Technology Lab (WET\_LAB)

· Major Field: Wireless Communication

· Advisor: Dr. Md. Fazlul Kader (Personal Website)

 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

· 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

Performance and Resource Optimization Lab (PROTON LAB)

University of New Mexico

**Research Assistant** 

Game Theory

Network Economics

Wireless Networks

Reinforcement Learning

### **Teaching Assistant**

University of New Mexico

• ECE-440 Introduction to Computer Networks

• ECE-524 Network Economics

#### **Research Assistant**

Wireless Emerging Technology Lab (WET LAB)

Universty of Chittagong

· Wireless Communication

• Internet of Things (IoT)

Simultaneous Wireless Information and Power Transmission

Energy Harvesting

# Volunteering Experience:

Vice 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 Jan. 2022- May 2022

Chattogram, Bangladesh May 2019 - Feb . 2021

Albuquerque, NM, USA Feb. 2022 - Present

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Chattogram, Bangladesh Jan. 2019 - Dec. 2021

Jan. 2022 - Present

Chattogram, Bangladesh Jan. 2015- Dec. 2018

Albuquerque, NM, USA

May 2022 - Present

### Skills

Programming Languages Software Tools Embedded Skills Python, MATLAB, C

MATLAB, Anaconda, Arduino-IDE, PSPICE, OpenAl Gym

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 Military Communications Conference, 2022. (Under Review)
- 2. Rahman, A. B., Siraj, M. S., Kubiak, N., Tsiropoulou, E. E., & Papavassiliou, S., "Network Economics-based Crowdsourcing in Online Social Networks", IEEE Global Communications Conference, 2022. (Under Review)
- 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.
- 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 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	<b>1st Position</b> in 1st APECE Project Competition, University of Chittagong <b>2nd Runners Up</b> , 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