Ratna Rani Sarkar
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OVERVIEW

I am Currently undertaking a PhD in Computer Science and Engineering and possess eight years of teaching experience at the university level. My research focuses on utilizing Ad-Hoc networks for disaster management purposes.

RESEARCH INTEREST

Ad-Hoc Network, Pocket Switched Network, Delay Tolerant Network , Internet of Things.

REFEREED PUBLICATIONS

1. **Sarkar, R. R.** , Chakrabarty, A. ., & Rahman, M. Z. . (2024). Resilient Connectivity: Leveraging Pocket Switched Networks for Post-Disaster Communication. *International Journal of Intelligent Systems and Applications in Engineering*, *12*(20s), 293–300.

2. R. Islam, R. Sarkar, and **Ratna. R. Sarkar,** "Integrated Blood Donation System with Smart Vending Machines," 3rd International Conference on Advancement in Electrical and Electronic Engineering (ICAEEE), Gazipur, 2024.

3. Md. Shahin, R. Sarkar, and **Ratna. R. Sarkar,** "IoT Based Smart Headgear for Motorbike," 3rd International Conference on Advancement in Electrical and Electronic Engineering (ICAEEE), Gazipur, 2024.

4. **Ratna R. Sarkar**, Md.Nazrul Islam , Rabiul Islam , Md. Shiblu Hasan , and Mohammad Zahidur Rahman ,"Empowering Resilience in Post-Disaster Communication with Low-End Communication Devices"2023 26th International Conference on Computer and Information Technology (ICCIT) 13-15 December 2023, Cox's Bazar, Bangladesh.

5. **Ratna. R. Sarkar**, A. Chakrabarty and M. Z. Rahman (2022), "Low-End Hand Held Communication Devices in a Post-Disaster Scenario," 2022 14th International Conference on Computational Intelligence and Communication Networks (CICN), Al-Khobar, Saudi Arabia, pp. 595-599.

6. **Ratna. R. Sarkar** and M. Z. Rahman (2022), "Transmission Power and Quality of service in MANET Routing Protocol,"International Journal of Wireless & Mobile Networks (IJWMN), Vol.14, No.4.
7. **Ratna. R. Sarkar**, A. Chakrabarty and M. Z. Rahman (2022), "Mobile Ad-hoc Networks: A Reviews on Routing Protocols," Jahangirnagar University Journal of Science, Volumn 43(1), 2021.
8. **Ratna R. Sarkar**, Amitabha Chakrabarty and Mohammad Zahidur Rahman (2021) VANET Routing Protocols in Real-World Mobility Tracing 13th International Conference on Computational Intelligence and Communication Networks (CICN).
9. Ripa Sarkar and **Ratna R. Sarkar** (2023), "Sentimental Analysis of Various TV Serials inSociety" *2023 15th International Conference on Computational Intelligence and Communication Networks (CICN)*, Bangkok, Thailand.
10. Soikat Hossain, **Ratna R. Sarkar,** Mohammad Abu Yousuf, and Mohammad Ali Moni, "IoT-Enabled Health Assistance for Post-Disaster Scenarios"Int. Conf. on Trends in Electronics and Health Informatics (Tehi) 2023.
11. **Ratna.R. Sarkar,** K. Rasul, and A.Chakrabarty, (2015) Survey on Routing in Pocket Switched Network.Wireless Sensor Network, 7, 113-128.
12. **Ratna.R. Sarkar**, K. Rasul, and A. Chakrabarty, (2015), Energy Efficient Routing (EER) Algorithm for Pocket Switched Network, International Journal of Computer Science and Network *(*IJCSN*)*, 5, 80-86.
13. **(Book Chapter Publication) R.R. Sarkar,** K. Rasul, and A. Chakrabarty, (2016), Routing Protocol for Pocket Switched Network, LAMBERT Academic Publishing (LAP).
14. Mostakim, Md Niaz & **Sarkar, Ratna** & Hossain, Md. (2019). Smart Locker: IOT-based Intelligent Locker with Password Protection and Face Detection Approach. International Journal of Wireless and Microwave Technologies. 9. 1-10.
15. “General Theorem & Applications of Manifolds with Connection”, Sharmin Akter, Umme Ruman, **Ratna Rani Sarkar**, IAmerican Journal of Engineering Research (AJER),Volume-7, Issue-11, pp-206-218.

EDUCATION

PhD in Computer Science and Engineering (Pursuing)
Thesis Topic: Communication in Post Disaster Scenario using Ad-Hoc Network

M.Sc. in Computer Science and Engineering (Achieved Highest Distinction)
Thesis Topic: Routing protocols in Pocket Switched Network.

B.Sc. in Computer Science and Engineering (Achieved Highest Distinction)

AWARD

Vice Chancellor's Medal 2016:

- Achieved the Vice Chancellor's Medal having obtained the highest CGPA in the degree of MSc in CSE .

JOB EXPERIENCES

Assistant Professor (CSE) 29th June 2018 - 13th February 2024.
Atish Dipankar University of Science & Technology.

Lecturer (CSE) 10th June 2014 -28th June 2018.
Atish Dipankar University of Science & Technology.