

## SOHAG SARKER

Associate Professor  
Dept. of Information and Communication Engineering  
Pabna University of Science & Technology.  
Email: [sohagsarker5614@gmail.com](mailto:sohagsarker5614@gmail.com) ; Contact: +8801722- 456324.



### CAREER OBJECTIVES

---

My professional objective is to keep a balance in research, teaching, supervising and service related activities in order to provide sustainable training for highly qualified personnel.

### EDUCATION

---

- M.Phil** *Information & Communication Engineering, 2019*  
Department of Information & Communication Engineering, Pabna University of Science & Technology, Pabna-6600, Bangladesh.  
**Research Topic:** Performance Analysis of Downlink DAS Based Cooperative Wireless Communication System.  
**Degree awarded:** December, 2019  
**Medium of Instruction:** English
- Master of Science** *Information & Communication Engineering, 2010 (Held in 2012),*  
Department of Information & Communication Engineering, University of Rajshahi, Rajshahi-6205, Bangladesh  
**Result:** First Class, 72.125%.  
**Medium of Instruction:** English
- Bachelor of Science** *Information & Communication Engineering, 2009 (Held in 2011),*  
Department of Information & Communication Engineering, University of Rajshahi, Rajshahi-6205, Bangladesh  
**Result:** First Class, 65.218%.  
**Medium of Instruction:** English

### RESEARCH INTEREST

---

- Wireless Communication
- Intelligent Systems
- Machine Learning
- Pattern Recognition
- Computer Vision
- IoT

### RESEARCH WORK

---

- M.Phil Level** **Title:** Performance Analysis of Downlink DAS Based Cooperative Wireless Communication System.
- Post Graduate Level** **Title:** Performance Analysis of Two-Layer Spreading Scheme based FEC encoded MC-CDMA wireless communication system under implementation of various signal detection schemes

## PROFESSIONAL SKILLS

---

**Programming Language** : C, C#, JAVA, Python, and MATLAB.  
**RDBMS** : Microsoft Access and Microsoft SQL Server.  
**Operating System** : Microsoft Windows (2000 Server, 2003 Server, XP, VISTA, Windows 7, and Windows 10).

## LANGUAGE SKILLS

---

**Bengali** : Mother Tongue.  
**English** : Good Communication Skills (Reading, Writing, and Presentation).

## PROFESSIONAL EXPERIENCES

---

**Position** : Associate Professor, Department of Information & Communication Engineering  
**Institution** : Pabna University of Science & Technology, Pabna-6600, Bangladesh  
**Website** : <https://www.pust.ac.bd/>  
**Duration** : From 7th October, 2021 to continuing.

**Position** : Assistant Professor, Department of Information & Communication Engineering  
**Institution** : Pabna University of Science & Technology, Pabna-6600, Bangladesh  
**Website** : <https://www.pust.ac.bd/>  
**Duration** : From 01 September 2015 to 6th October, 2021.

**Position** : Lecturer, Department of Information and Communication Engineering  
**Institution** : Pabna University of Science & Technology, Pabna-6600, Bangladesh  
**Duration** : From 01 September, 2013 to 31 August, 2015.

**Position** : Lecturer, Dept. of Electrical & Electronic Engineering, Faculty of Engineering  
**Institution** : University of Information Technology & Sciences (UITS), Jamalpur Twin Tower (Tower-2), Baridhara, Dhaka, Bangladesh.  
**Duration** : From 08 January, 2013 to 31 August, 2013.

## MAJOR JOB RESPONSIBILITIES

---

### **As Associate Professor and Assistant Professor Key Responsibilities:**

- † Supervising Undergraduate Students
- † Managing Research Group of Students
- † Conducting Class, Lab, Seminar, and Workshop
- † Involving Different Administrative Works

### **As Lecturer Key Responsibilities:**

- † Managed Research Group of Students
- † Conducted Class, Seminar, and Workshop
- † Involved Different Administrative Works

## COURSES TAUGHT AND LABORATORY SESSIONS CONDUCTED

---

### Master of Engineering (MSc. Engineering.) and Bachelor of Engineering (BSc. Engineering) level-

- Communication Theory
- Signals and Systems
- Information Theory and Coding
- Digital Communication
- Digital Signal Processing
- Data Communication and Networking
- Programming with C
- Circuit theory and Analysis
- Basic Electronics

## AWARDS AND ACHIEVEMENTS

---

- Received Merit Scholarship for outstanding performance in the B.Sc.(Hon's) Examination-2009 from University of Rajshahi, Rajshahi, Bangladesh.

## PUBLICATIONS

---

1. Mst. Farzana Aktter, Md. Anwar Hossain\*, **Sohag Sarker**, AFM Zainul Abadin, and Mirza AFM Rashidul Hasan(2022). Performance Analysis of Deep Learning based Human Activity Recognition Methods. Journal of Applied Science & Process Engineering. [Accepted]
2. Khaleduzzaman K, Mahmud MH, Debnath T, **Sarker S**, and Podder PK. (2021). Detection and implementation of blood group and Hb level by image processing techniques. Aust. J. Eng. Innov. Technol. 2021; 3(5), 73-81. ISSN: 2663-7804 (Online) & 2663-7790 (Print). <https://doi.org/10.34104/ajeit.021.073081>
3. **Sarker S**, Ara LA, Alam T, Debnath T. Design and Analysis of MIMO F-OFDM Systems for 5G and Beyond Wireless Communications. International Journal of Recent Technology and Engineering (IJRTE). 2021; 10(2): 203-210; ISSN: 2277-3878 (Online).
4. Abadin AZ, **Sarker S**, Hosain MS, Ahmed MM, Imtiaz A. A Comprehensive Study and Analysis of Different Routing Protocols for Enterprise LAN. International Journal of Science and Business. 2021; 5(8):20-8; ISSN: 2520-4750 (Online), 2521-3040 (Print).
5. Mahmud MH, Khaleduzzaman K, **Sarker S**, Paul LC. Effect of Path Loss Models on Performance of 5G Compatible MIMO WINDOW-OFDM Systems. In 2020 International Conference on Smart Technologies in Computing, Electrical and Electronics (ICSTCEE). 2020; (pp. 257-262). IEEE.
6. Paul LC, Pramanik RK, Rashid MM, **Sarker S**, Mahmud MZ, Islam MT. An ITO Based High Gain Optically Transparent Wide Band Microstrip Antenna for K Band Satellite Communication. In 2019 International Conference on Robotics, Electrical and Signal Processing Techniques (ICREST). 2019; (pp. 638-642). IEEE.
7. Paul LC, Haque MA, **Sarker S**, Rashid MM, Haque MA, Roy TK. Design and Performance Exploration of a DGS Metamaterial MPA by Etching Four Dual Isosceles Triangular Defects on the Ground Plane. In 2018 International Conference

- on Computer, Communication, Chemical, Material and Electronic Engineering (IC4ME2). 2018; (pp. 1-4). IEEE.
8. Paul L. C., Hosain M. S., **Sarker S.**, Prio M. H., Morshed M., Sarkar A. K. The Effect of Changing Substrate Material and Thickness on the Performance of Inset Feed Microstrip Patch Antenna. *American Journal of Networks and Communications (AJNC)*. 2015; 4(3), pp. 54-58, ISSN: 2326-893X (Print), ISSN: 2326-8964 (Online), Publisher: Science Publishing Group, USA. doi: 10.11648/j.ajnc.20150403.16.
  9. **Sarker S**, Ullah S E , "Secure Color Image Transmission in a Downlink DAS Group Cell Scheme based MIMO OFDMA Wireless Communication System", *International Journal of Advanced Research in Computer and Communication Engineering*. 2015; 4(7), pp. 302-305, ISSN (Online): 2278-1021, ISSN (Print): 2319-5940.
  10. Sadique JJ, **Sarker S**, Ullah SE. Performance Assessment of a Block Cipher Encryption based Channel Encoded Cooperative MIMO MCCDMA Wireless Communication System. *International Journal of Future Generation Communication and Networking*. 2014;7(1):105-16.
  11. **Sarker S**, Ullah SE. Performance analysis of DAS Group Cell scheme aided Downlink Turbo encoded MIMO OFDMA Wireless Communication System. *International Journal of Scientific & Engineering Research*. 2014; 5(8), pp. 5-9, ISSN: 2229-5518.
  12. Lutfor T, Alam M Z, **Sarker S**. Analysis of Wavelet Transform-Domain LMS-Newton Adaptive Filtering Algorithms with Second-Order Autoregressive (AR) Process. *American Journal of Signal Processing*. 2013; 3(3): 54-70.
  13. **Sarker S**, Lutfor T , Alam M Z. Performance Analysis of Maximal-Ratio Combining and Equal Gain Combining in Fading Channels. *Global Journal of Researches in Engineering: F (GJRE-F), Electrical and Electronics Engineering*. 2013, 13(17), pp. 17-23, ISSN: 2249-4596 (online), ISSN: 0975-5861 (print), Publisher: Global Journals Inc., USA.
  14. Enam F, Rabbani M, Islam M, **Sarker S**. Performance Evaluation of an Orthogonal Frequency Division Multiplexing based Wireless Communication System with implementation of Least Mean Square Equalization technique. arXiv preprint arXiv:1212.5182, 2012.
  15. **Sarker S**, Enam F, Rashed MG, Ullah SE. Performance Analysis of Two-Layer Spreading scheme based FEC encoded MC-CDMA wireless communication system under implementation of various signal detection schemes. *Journal of Emerging Trends in Computing and Information Sciences*. 2012; 3(4):554-60.

## REFERENCES

---

**[1] Professor Dr. Dipankar Das**

Department of Information and Communication Engineering

University of Rajshahi

Rajshahi – 6205, Bangladesh.

Mobile : +880-1701-935297.

Email : [dipankar\\_ru@yahoo.com](mailto:dipankar_ru@yahoo.com)

**[2] Dr. Pallab Kanti Poddar**

Associate Professor

Department of Information and Communication Engineering

Pabna University of Science and Technology Pabna, Bangladesh

Mobile : +61478085581.

Email : [ppodder@csu.edu.au](mailto:ppodder@csu.edu.au), [pallabcsu@gmail.com](mailto:pallabcsu@gmail.com)

*Date: 01.06.2022*



*01.06.2022*

*(Sohag Sarker)*