Dr. Md. Najmul Hossain (Senior Member, IEEE and Member, IEEE ComSoc)

PhD in Advanced Wireless Communication Systems
Saitama University, Saitama, Japan.

Professor
Dept. of Electrical, Electronic and Communication Engineering (EECE)
&
Former Director
Student Advisor Office
Pabna University of Science and Technology
Pabna-6600, Bangladesh
Cell: +8801733264993 (Personal)
and
Editor, Journal of Engineering Advancements, SciEn Publishing Group

Email: najmul_eece@pust.ac.bd, najmul.ru@gmail.com, najmul@ieee.org
Links: Work, Google Scholar, ResearchGate, IEEE, Scopus, LinkedIn

Area of Research Interests

Next-Generation B5G and 6G Wireless Communication Networks; Advanced Wireless Communications and Corresponding Signal Processing for OFDM, OTFS, OCDM, MIMO, RIS, UAV, and mmWave Communications.

Citations

Total Citation: 636 (Based on Google Scholar)

Academic Credentials

2020 PhD in Advanced Wireless Communication Systems, Department of Information and Computer Sciences (ICS), Graduate School of Science and Engineering, Saitama University, Saitama, Japan.

2008 M.Sc. in Applied Physics and Electronic Engineering (APEE) with First Class from the University of Rajshahi, Rajshahi-6205, Bangladesh.

2007 B.Sc. (Honours) in Applied Physics and Electronic Engineering (APEE) with First Class from the University of Rajshahi, Rajshahi-6205, Bangladesh.

2002 Higher Secondary Certificate (HSC) in Science Group with First Division from Jamira College, Puthia, Rajshahi, Bangladesh.

2000 Secondary School Certificate (SSC) in Science Group with First Division from Jamira High School, Puthia, Rajshahi, Bangladesh.

PhD Thesis

Title: Reduction of Peak-to-Average Power Ratio and Out-of-Band Power Emission for OFDM and OTFS Systems.

M.Sc. Thesis

Title: Study of the SIR-based Power Control Algorithms in Code Division Multiple Access Networks.

Undergraduate (B.Sc. Honours) Thesis

Title: Medical Signal Processing on a PC for ECG Using a Sensor.

Publications

Journal Articles (33)

2025 **Md. Najmul Hossain**, Md. Rakibul Islam, SK. Tamanna Kamal, Atia Kaniz, Shaikh Enayet Ullah, and Tetsuya Shimamura. "Integrated WHT-and DFT-based Multiuser Massive MIMO System for Secure RIS-enabled mmWave Communications." *IEEE Access,* Vol. 13, No. xx, pp. 111037-111055, 2025. **SCIE Indexed**
DOI: https://doi.org/10.1109/ACCESS.2025.3583557

2025 **Md. Najmul Hossain**, Atia Kaniz, SK. Tamanna Kamal, Shaikh Enayet Ullah, and Tetsuya Shimamura. "Multiuser FDSS-based DCT-Spread Massive MIMO OFDM System for Secure RIS-assisted UAV-enabled Networks." *IEEE Access,* Vol. 13, No. xx, pp. 35254-35269, 2025. **SCIE Indexed**
DOI: https://doi.org/10.1109/ACCESS.2025.3544477

2025 **Md. Najmul Hossain**, Kottakkaran Sooppy Nisar, Tetsuya Shimamura, Md. Rakibul Islam, SK. Tamanna Kamal, Shaikh Enayet Ullah. "Transceiver Design of a Secure Multiuser FDSS-based DFT-Spread OFDM System for RIS- and UAV-assisted THz Communications." *IEEE Open Journal of the Communications Society,* Vol. 06, No. xx (2025): 708-726. **Scopus Indexed**
DOI: https://doi.org/10.1109/OJCOMS.2025.3526889

2025

Md. Najmul Hossain, Tetsuya Shimamura, SK. Tamanna Kamal, Md Abdur Rahim, Md Shahajan Ali, Shaikh Enayet Ullah. "Waveform Design and Nonlinear Sensitivity Analysis of WR-OCDM System for B5G Wireless Communications." *Multidisciplinary Science Journal,* Vol. 7, No. 5 (2025): xxx-xxx. **Scopus Indexed**
DOI: https://doi.org/10.31893/multiscience.2025206

2025 SK Tamanna Kamal, Fowzia Jabin, Shaikh Enayet Ullah, Umme Salma Jahan, **Md. Najmul Hossain**, Md Abdur Rahim, Fahmid Al Farid, Sarina Mansor. "Performance Analysis of Multiuser mmWave DCT-Spread CP-Less OFDM Communication System." *Multidisciplinary Science Journal,* Vol. 7, No. 3 (2025): xxx-xxx. **Scopus Indexed**
DOI: https://doi.org/10.31893/multiscience.2025135

2024 **Md. Najmul Hossain**, SK. Tamanna Kamal, Jinia Rahman, Shaikh Enayet Ullah, Tetsuya Shimamura. "Transceiver Design for MIMO ZP-OTFS-SCMA System with Physical Layer Security." *Journal of Communications,* Vol. 19, No. 10, pp. 485-497, 2024. **Scopus Indexed**
DOI: https://doi.org/10.12720/jcm.19.10.485-497

2024 **Md. Najmul Hossain**, Radd Raad, Kottakkaran Sooppy Nisar, Shaikh Enayet Ullah, Fowzia Jabin, SK. Tamanna Kamal, Tetsuya Shimamura, Faisel Tubbal, and Suhila Abulgasem. "Design and implementation of secure CP-less multi-user OCDM transceiver for 6G wireless communication networks." *IEEE Access,* Vol. 12, No. xx, pp. 79276-79296, 2024. **SCIE Indexed**
DOI: https://doi.org/10.1109/ACCESS.2024.3409473

2024 Tahmid Hasan, Md. Abdur Rahim, Jungpil Shin, Satoshi Nishimura, and **Md. Najmul Hossain**. "Dynamics of Digital Pen-Tablet: Handwriting Analysis for Person Identification Using Machine and Deep Learning Techniques." *IEEE Access,* Vol. 12, pp. 8154-8177, 2024. **SCIE Indexed**
DOI: https://doi.org/10.1109/ACCESS.2024.3352070

2024 Fahmid Al Farid, Md Abdur Rahim, Arpa Kar Puza, Abu Saleh Musa Miah, **Md. Najmul Hossain**, Sarina Mansor, Hezerul Abdul Karim, Md. Nur Alam. "An enhanced hybrid model based on CNN and BiLSTM for identifying individuals via handwriting analysis." *Computer Modeling in Engineering & Sciences,* Vol. 140, No. 2(2024): 1689-1710. **SCI Indexed**.
DOI: https://doi.org/10.32604/cmes.2024.048714

2024 Liton Chandra Paul, Sayed Shifat Ahmed, Tithi Rani, Md Ashraful Haque, Tushar Kanti Roy, **Md. Najmul Hossain**, and Md Azad Hossain. "A smart medicine reminder kit with mobile phone calls and some health monitoring features for senior citizens." *Heliyon,* Vol. 10, No. 4 (2024): 1-12. **SCIE Indexed**
DOI: https://doi.org/10.1016/j.heliyon.2024.e26308

2024 Md Abdur Rahim, Jungpil Shin, Md. Abul Hashem, Hemel Sharker Akash, Md. Imran Hossain, **Md. Najmul Hossain**, Abu Saleh Musa Miah. "Advanced Touchless

HCI: A Gesture Recognition-Based Multilingual Virtual Keyboard for Character Input." *Journal of Tianjin University Science and Technology,* Vol. 57, No. 11 (2024): xxx-xxx. **Scopus Indexed**
DOI: https://doi.org/10.5281/zenodo.14039789

2024 M.S. Ali, R. Parvin, M.A.H. Chowdhury, M. Sabah, M. Saiful Islam, M. Hasan, M.S. Islam, A. Adhikary, M.T. Ahmed, M.H.S. Shanto, **Md. Najmul Hossain**. "Pressure induced impact on mechanical, electrical, optical, and thermal properties of Li_4OX_2 (X = Cl, Br and I): DFT study." *Physics Open,* Vol. 20, No. xx(2024): xxx-xxx. **Scopus Indexed**
DOI: https://doi.org/10.1016/j.physo.2024.100229

2024 Md Arifour Rahman, Md Masudur Rahman, Arifuzzaman Joy, and **Md. Najmul Hossain**. "Spectrum estimation for voiced speech using average weighted linear prediction." *World Journal of Advanced Research and Reviews,* Vol. 10, No. 2(2024): 317-329. **Crossref Indexed**
DOI: https://doi.org/10.30574/wjarr.2024.22.2.1569

2024 Md. Nur Alam, Md. Abdur Rahim, **Md. Najmul Hossain**, and Cemil Tunc. "Dynamics of Damped and Undamped Wave Natures of the Fractional Kraenkel-Manna-Merle System in Ferromagnetic Materials." *Journal of Applied and Computational Mechanics,* Vol. 10, No. 2(2024): 317-329. **Scopus Indexed**
DOI: https://doi.org/10.22055/JACM.2023.45064.4307

2024 Md Imran Hossain, Md Abdur Rahim, and **Md. Najmul Hossain**. "Single-channel Speech Separation Based on Double-density Dual-tree CWT and SNMF." *Annals of Emerging Technologies in Computing (AETiC),* Vol. 8, No. 1 (2024): 1-12. Published Online: 01 January 2024. **Scopus Indexed**
DOI: https://doi.org/10.33166/AETiC.2024.01.001

2024 Md Abdur Rahim, Abu Saleh Musa Miah, Hemel Sharker Akash, Jungpil Shin, Md. Imran Hossain, **Md. Najmul Hossain**. "Multi-Modal Hand Gesture Recognition Using a Three-Stream Stacked LSTM Deep Learning Approach." *Multimedia Tools and Applications,* Vol. xx, No. xx (2024): xxx-xxx. **Scopus Indexed** [Under Review]
DOI: https://doi.org/10.48550/arXiv.2408.08035

2023 **Md. Najmul Hossain**, Al Amin Islam, Md. Abdur Rahim, Md. Imran Hossain, and Md. Arifour Rahman. "Design and Performance Analysis of Defected Ground Slotted Patch Antenna for Sub-6 GHz 5G Applications." *Journal of Engineering Advancements,* Vol. 4, No. 4 (2023): 130-140. Published Online: 31 Dec. 2023. **Scilit Indexed**
DOI: https://doi.org/10.38032/jea.2023.04.004

2023 **Md. Najmul Hossain**, Hasan Al-Mamun, Muhammad Shafiqul Islam, Liton Chandra Paul, Md. Abdur Rahim, Md. Matiqul Islam, Md. Ashraful Islam, Md. Arifour Rahman. "Challenges and Possible Solutions of Implementing 5G Mobile Net-

works in Bangladesh." *Mobile Information Systems,* Vol. 2023, Article ID 9586126, 14 pages, 2023. **Scopus Indexed**
DOI: https://doi.org/10.1155/2023/9586126

2023 Liton Chandra Paul, Akash Majumder, Tithi Rani, **Md. Najmul Hossain**, Md. Abdur Rahim, Jungpil Shin, and Keun Soo Yun. "Design and Analysis of a UWB Slotted Vivaldi Antenna for Microwave Imaging Applications." *IEIE Transactions on Smart Processing & Computing,* Vol. 12, No. 4 (2023): 350-357. **Scopus Indexed**
DOI: https://doi.org/10.5573/IEIESPC.2023.12.4.350

2023 Liton Chandra Paul, Sarker Saleh Ahmed Ankan, Tithi Rani, Muharrem Karaaslan, **Md. Najmul Hossain**, Ahmed Jamal Abdullah Al-Gburi, Himel Kumar Saha, and Fatih Özkan Alkurt. "A wideband highly efficient omnidirectional compact antenna for WiMAX/lower 5G communications." *International Journal of RF and Microwave Computer-Aided Engineering,* vol. 2023, Article ID 7237444, 10 pages, 2023. **Scopus Indexed**
DOI: https://doi.org/10.1155/2023/7237444

2023 **Md. Najmul Hossain**, Al Amin Islam, Jungpil Shin, Md. Abdur Rahim, and Md. Humaun Kabir. "Performance Evaluation of Slotted Star-Shaped Dual-band Patch Antenna for Satellite Communication and 5G Services." *International Journal of Wireless and Microwave Technologies (IJWMT),* Vol. 13, No. 3 (2023): 49-63. Published Online: 08 June 2023. **CNKI Scholar Indexed**
DOI: https://doi.org/10.5815/ijwmt.2023.03.05

2023 Md Abdur Rahim, Md Alfaz Hossain, **Md Najmul Hossain**, Jungpil Shin, and Keun Soo Yun. "Stacked ensemble-based type-2 diabetes prediction using machine learning techniques." *Annals of Emerging Technologies in Computing (AETiC),* Vol. 7, No. 1 (2023): 30-39. Published Online: 01 January 2023. **Scopus Indexed**
DOI: https://doi.org/10.33166/AETiC.2023.01.003

2022 **Md. Najmul Hossain**. "Performance Evaluation of MIMO DFT-Spread WR-OFDM System for Spectrum Efficiency and Power Efficiency." *Journal of Information and Telecommunication,* Vol. 6, No. 4 (2022): 465-481. Published Online: 11 May 2022. **Scopus Indexed**
DOI: https://doi.org/10.1080/24751839.2022.2066847

2022 **Md. Najmul Hossain**, Liton Chandra Paul, Md. Abdur Rahim, and Jungpil Shin. "Multiband Slotted Crescent-shaped Patch Antenna for K-band Satellite and mmWave Communications." *IEIE Transactions on Smart Processing & Computing,* Vol. 11, No. 3 (2022): 213-221. **Scopus Indexed**
DOI: https://doi.org/10.5573/IEIESPC.2022.11.3.213

2021 **Md. Najmul Hossain**, and Heung-Gyoon Ryu. "Advanced OTFS Communication System with Compact Spectrum and Power Efficiency Improvement." *International Journal of Communication Systems,* Vol. 34, No. 16 (2021). **SCIE Indexed**
DOI: https://doi.org/10.1002/dac.4959

2020 **Md. Najmul Hossain**, Yosuke Sugiura, Tetsuya Shimamura, and Heung-Gyoon Ryu. "DFT-Spread OTFS Communication System with the Reductions of PAPR and Nonlinear Degradation." *Wireless Personal Communications,* Vol. 115, No. 3 (2020): 2211-2228. **SCIE Indexed**
DOI: https://doi.org/10.1007/s11277-020-07678-4

2019 **Md. Najmul Hossain**, Tetsuya Shimamura, and Heung-Gyoon Ryu. "Nonlinear Characteristics of DFT-Spread WR-OFDM System for Spectrum-efficient Communications." *IEIE Transactions on Smart Processing & Computing,* Vol. 8, No. 6 (2019): 490-498. **Scopus Indexed**
DOI: https://doi.org/10.5573/IEIESPC.2019.8.6.490

2014 Iffat Ara, **Md. Najmul Hossain**, and SM Yahea Mahbub. "Baseline Drift Removal and De-Noising of the ECG Signal using Wavelet Transform." *International Journal of Computer Applications,* Vol. 95, No. 16 (2014): 15-17.
DOI: https://doi.org/10.5120/16678-6783

2014 Iffat Ara, **Md. Najmul Hossain**, and Md. Abdur Rahim. "ECG Signal Analysis using Wavelet Transform." *International Journal of Scientific & Engineering Research,* Vol. 5, No. 5 (2014): 1509-1515.

2013 Md. Rashedul Islam, Md. Babul Islam, Md. Firoz Ahmed, **Md. Najmul Hossain**, and Md. Abdur Rahim. "MEL-LP based Generalized Cepstral Analysis for Noisy Speech Recognition using HMM." *International Journal of Scientific Research and Management (IJSRM),* Vol. 1, No. 9 (2013): 466-470.

2013 **Md. Najmul Hossain**, Md. Abdur Rahim, and Iffat Ara. "SIR-based Power Control Algorithms in CDMA Networks." *Global Journal of Computer Science and Technology, Network, Web & Security,* Vol. 13, No. 10 (2013): 41-45.

2013 **Md. Najmul Hossain**, Md. Abdur Rahim, Md. Rashedul Islam, and Md. Shafiul Azam. "Performance Analysis of Nash and Power Balancing Algorithms for SIR-Based Power Control in CDMA Networks." *International Journal of Scientific & Engineering Research,* Vol. 4, No. 5 (2013): 2121-2125.

2013 Md. Abdur Rahim, **Md. Najmul Hossain**, Tanzillah Wahid, and Md. Shafiul Azam. "Face recognition using local binary patterns (LBP)." *Global Journal of Computer Science and Technology, Graphics & Vision,* Vol. 13, No. 4 (2013): 1-7.

International Conferences (12)

2025 **Md. Najmul Hossain**, Sayed Shifat Ahmed, Md. Sarwar Hosain, and Tetsuya Shimamura. "Design and Performance Analysis of Slotted Patch Antenna for Sub-6 GHz 5G Communications." *International Conference on Signal Processing, Information, Communication and Systems (SPICSCON).* pp. xx-yy. IEEE, 2025. [Accepted]

2025 Md. Rifat Hossen, Khairul Azmi Abu Bakar, Mohammad Kamrul Hasan, Md. Uzzal Mia, **Md. Najmul Hossain**, and Md. Sarwar Hosain. "Enhancing Robustness and Accuracy of Bone-Conducted Speech Emotion Recognition via Transformer Models." *In* 2025 *10th International Conference on Electrical Engineering and Informatics (ICEEI).* pp. xx-yy. IEEE, 2025. [Accepted]

2024 Md. Shariful Islam, Md Abdur Rahim, Nitun Kumar Podder, **Md. Najmul Hossain**, and Md. Imran Hossain. "Prediction of Irregular Bangladesh-EU Migration Trends Using Machine Learning Techniques." *In* 2024 *IEEE International Conference on Advancement in Electrical and Electronic Engineering (ICAEEE).* pp. 01-06. IEEE, 2024.
DOI: http://doi.org/10.1109/ICAEEE62219.2024.10561697

2023 **Md. Najmul Hossain**, Md. Aheteshamul Haque Nayeem, Liton Chandra Paul, and Tetsuya Shimamura. "Waveform Design and Performance Analysis of DFT-Spread WR-OCDM System for PAPR and OOBE Reduction." *In* 2023 *IEEE International Conference on Telecommunications and Photonics (ICTP).* pp. 01-05. IEEE, 2023.
DOI: https://doi.org/10.1109/ICTP60248.2023.10490647

2022 Md. Matiqul Islam, Md. Ashraful Islam, and **Md. Najmul Hossain**. "Channel Estimation and Signal Detection in OFDM system using Deep Learning and its performance on Digital Modulation." *International Conference on Physics*-2022, Atomic Energy Centre, Dhaka, Bangladesh, 19-21 May 2022.
Available: https://bdphso.org/wp-content/uploads/2023/08/Full-Abstracts-Book-International-Conference-on-Physics-2022.pdf.

2022 Md. Ashraful Islam, Md. Matiqul Islam, Md. Firoz Ahmed, **Md. Najmul Hossain**, and Md. Hasnat Kabir. "Validate the Improvement of Footprint of the Female Connector on PCB Surface by Using HFSS." *International Conference on Physics*-2022, Atomic Energy Centre, Dhaka, Bangladesh, 19-21 May 2022.
Available: https://bdphso.org/wp-content/uploads/2023/08/Full-Abstracts-Book-International-Conference-on-Physics-2022.pdf.

2021 Sajeeb Chandra Das, Liton Chandra Paul, **Md. Najmul Hossain**, Md. Zulfiker Mahmud, and Rezaul Azim. "A Dual Band Miniaturized Spiral-shaped Patch Antenna for 5G and WiFi-5/6 Applications." *In* 2021 *IEEE International Conference on Signal Processing, Information, Communication and Systems (SPICSCON).* pp. 87-90. IEEE, 2021.
DOI: https://doi.org/10.1109/SPICSCON54707.2021.9885246

2021 Md. Moklesur Rahman, Heung-Gyoon Ryu, and **Md. Najmul Hossain**. "Ultra-Wideband Slotted Patch Antenna for mm-Wave Wireless & Ku-band Satellite System." *In* 2021 *18th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON),* pp. 491-494. IEEE, 2021.
DOI: https://doi.org/10.1109/ECTI-CON51831.2021.9454901

2021 Md. Moklesur Rahman, Heung-Gyoon Ryu, and **Md. Najmul Hossain**. "A Compact Slotted Patch Antenna Design for Multiband Applications." *In* 2021 *IEEE Asia Pacific Conference on Wireless and Mobile (APWiMob),* pp. 147-150. IEEE, 2021. DOI: https://doi.org/10.1109/APWiMob51111.2021.9435241

2021 Toufiq Aziz, Tarek Mahmud Faisal, Heung-Gyoon Ryu, and **Md. Najmul Hossain**. "Vehicle Speed Control and Security System." *In* 2021 *International Conference on Electronics, Information, and Communication (ICEIC),* pp. 1-4. IEEE, 2021. DOI: https://doi.org/10.1109/ICEIC51217.2021.9369808

2020 **Md. Najmul Hossain**, Yosuke Sugiura, Tetsuya Shimamura, and Heung-Gyoon Ryu. "Waveform Design of Low Complexity WR-OTFS System for the OOB Power Reduction." *In* 2020 *IEEE Wireless Communications and Networking Conference Workshops (WCNCW),* pp. 1-5. IEEE, 2020. DOI: https://doi.org/10.1109/WCNCW48565.2020.9124756

2018 **Md. Najmul Hossain**, Tetsuya Shimamura, Dayoung Kim, and Heung-Gyoon Ryu. "Waveform Design of DFT-Spread WR-OFDM System for the OOB and PAPR Reduction." *In* 2018 *International Conference on Information and Communication Technology Convergence (ICTC),* pp. 792-796. IEEE, 2018. DOI: https://doi.org/10.1109/ICTC.2018.8539398

Scholarships & Awards

2017 Japanese Government (Monbukagakusho) Scholarship awarded by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) for pursuing doctoral degree in Japan (Period: October, 2017 to September, 2020).

2010 Received "Gold Medal" from the Honorable Vice-Chancellor of the University of Rajshahi for outstanding academic performance in B.Sc. (Honours) level.

2008 Secured 5th Position in M.Sc. (Thesis) Examination Results.

2007 Secured 3rd Position in B.Sc. (Honours) Examination Results.

2004-2007 Undergraduate scholarship from the University of Rajshahi throughout the four years for excellent academic performance.

Research Grants

FY:2025-2026 **Project Title:** AI-Enhanced RIS-Assisted UAV-Enabled Circular Pulse-Shaping OTSM System for 6G Mobile Vehicle Networks: Design and Performance Evaluation, Funded by University Grants Commission of Bangladesh and Pabna University of Science and

Technology, Pabna-6600, Bangladesh.

FY:2024-2025 **Project Title:** Multiuser RIS-assisted UAV-enabled CP-less Orthogonal Delay-Doppler Division Multiplexing System, Funded by University Grants Commission of Bangladesh and Pabna University of Science and Technology, Pabna-6600, Bangladesh.

FY:2023-2024 **Project Title:** Design and Performance Evaluation of DFT-Spread WR-OCDM for Next-Generation Wireless Communication System, Funded by University Grants Commission of Bangladesh and Pabna University of Science and Technology, Pabna-6600, Bangladesh.

FY:2022-2023 **Project Title:** Windowing and Restructuring-Orthogonal Chirp Division Multiplexing (WR-OCDM) System for Next-Generation Wireless Communication Systems, Funded by University Grants Commission of Bangladesh.

FY:2022-2023 **Project Title:** Rectangular Shape Slotted Patch Antenna for the Sub-6 GHz 5G Applications, Funded by University Grants Commission of Bangladesh and Pabna University of Science and Technology, Pabna-6600, Bangladesh.

FY:2022-2023 **Project Title:** Deep Learning-based Hand Gestures Recognition for Non-touch Interface in Industrial Environments, R&D Projects Supported by the Ministry of Science and Technology, Bangladesh. GRANT NUMBER: SRG-222429

FY:2021-2022 **Project Title:** Multiband Slotted Crescent-shaped Patch Antenna for K-band Satellite and mmWave Communications, Funded by University Grants Commission of Bangladesh and Pabna University of Science and Technology, Pabna-6600, Bangladesh.

Teaching Experiences

Jun.2024-Present **Professor**, Department of Electrical, Electronic and Communication Engineering, Pabna University of Science and Technology, Pabna-6600, Bangladesh.

Dec.2020-Present **Associate Professor**, Department of Electrical, Electronic and Communication Engineering, Pabna University of Science and Technology, Pabna-6600, Bangladesh.

Jan.2014-Dec.2020 **Assistant Professor**, Department of Electrical, Electronic and Communication Engineering, Pabna University of Science and Technology, Pabna-6600, Bangladesh.

Jan.2012-Jan.2014 **Lecturer**, Department of Electrical, Electronic and Communication Engineering, Pabna University of Science and Technology, Pabna-6600, Bangladesh.

Administrative Experiences

Feb.2023-Aug.2024

Director, Student Advisor Office, Pabna University of Science and Technology, Pabna-6600, Bangladesh.

Nov.2022-May2025 Nominated Representative for MoU Affairs, Pabna University of Science and Technology, Pabna-6600, Bangladesh.

Nov.2021-Mar.2024 Executive Member of the Academic Council in the Associate Professor category, Pabna University of Science and Technology, Pabna-6600, Bangladesh.

Thesis Supervisions

Thesis Titles:

- Performance Analysis of Multiuser mmWave DCT-Spread CP-less OFDM Communication System
- Nonlinear Sensitivity analysis of Multicarrier Systems
- Design and Performance Analysis of Slotted Patch Antenna for Sub-6 GHz 5G and Ultra-wideband Applications
- Design and Analysis of Compact Size Slotted Microstrip Patch Antenna for Terahertz Applications
- Performance Analysis of LST-encoded MIMO SC-FDMA System for Audio and Video Signal Transmission for Beyond 5G Wireless Networks.
- Polar Channel-encoded V-BLAST MIMO SC-FDMA System for beyond 5G Wireless Networks.
- A Triple-Band Compact Slotted Patch Antenna Design for 17 GHz, 24 GHz and 28 GHz Applications.
- Waveform Design and Performance Analysis of DFT-Spread WR-OCDM System for PAPR and OOBE Reduction.
- Design and Performance Analysis of MIMO Antennas for WLAN, C Band, K Band and Ku Band Applications.
- Waveform Design and Performance Analysis of WR-OCDM System under Nonlinear HPA Environments.
- Design and performance analysis of defected ground slotted patch antenna for 5G communication services.
- Challenges and Possible Solutions of 5G Networks in Bangladesh.
- An Investigation into the Application of Machine Learning for Detection of DDOS Attacks over Cloud Computing Systems in IoT Networks.

- 5G-Future Generation Technologies of Mobile and Wireless Communication.
- Utility Maximization Power Control for Device-to-Device Communication in Cellular Networks.
- Study of the Simple Distributed Autonomous Power Control Algorithm and its Convergence.
- Performance Evaluation of SIR-based Power Control Algorithms in CDMA Network.
- Power Control for a Spread Spectrum Cellular Mobile Radio System.
- Performance Analysis of Optimum Transmitter Power Control in Cellular Radio Systems.
- Cloud Networking and Security Issues in the Cloud.
- A Review on Cloud Network Security.

Reviewer of International Journals and Conferences

- IEEE Internet of Things Journal, IEEE
- IEEE Journal on Selected Areas in Communications, IEEE
- IEEE Transactions on Information Forensics & Security, IEEE
- IEEE Transactions on Microwave Theory and Techniques, IEEE
- Defence Technology, Elsevier
- IEEE Wireless Communications Letters, IEEE
- IEEE Photonics Technology Letters, IEEE
- China Communications, CIC and IEEE
- IET Signal Processing, Wiley
- Telecommunication Systems, Springer
- Journal of Electrical and Computer Engineering, Wiley
- IEEE Transactions on Vehicular Technology, IEEE
- Journal of Communications and Networks, KICS
- IEEE Access, IEEE
- Discover Electronics, Springer
- Scientific Reports, Nature Portfolio
- Wireless Networks, Springer

- Plos One
- IEEE Open Journal of the Communications Society, IEEE
- IEEE Antennas and wireless propagation letters, IEEE
- IEEE Communications letters, IEEE
- IEEE Transactions on Communications, IEEE
- International Journal of Communication Systems, Wiley
- Wireless Personal Communications, Springer
- IEIE Transactions on Smart Processing and Computing, IEIE
- Journal of Engineering Advancements, SciEn Publishing Group
- Communications, Science Publishing Group
- International Conference on Recent Progresses in Science, Engineering and Technology (ICRPSET-2024)
- International Conference on Innovations in Science, Engineering and Technology 2024 (ICISET 2024)
- International Conference on Power Systems, 2023 (ICPS 2023), IEEE
- International Conference on Recent Progresses in Science, Engineering and Technology 2022 (ICRPSET-2022)
- International Conference on Electrical Engineering and Information & Communication Technology 2021 (iCEEiCT 2021), IEEE

Conducted Courses

- Digital Communication
- Computer Architecture and Organization
- Cellular Mobile Communication
- Radio and TV Engineering
- Communication Fundamentals
- Electrical Machine Systems
- Basic Electronics
- Basic Electrical Engineering

Computer Proficiency

- C, C++, Java, MATLAB, LaTex, Microsoft Office

Personal Attributes

- Strong work ethics, Hardworking, Time management, Critical thinking, Problem solving capacity, Leadership, Collaborations.

English Proficiency

- Medium of Instruction is English in my teaching profession at the Pabna University of Science and Technology. We are strongly instructed to conduct courses, supervisions and discussions in English.
- Medium of Instruction was English in PhD Program at the Graduate School of Science and Engineering, Saitama University, Saitama, Japan.
- Medium of Instruction was English in M.Sc. Program at the Dept. of Applied Physics and Electronic Engineering (APEE), University of Rajshahi, Rajshahi-6205, Bangladesh.
- Medium of Instruction was English in Undergraduate Program (B.Sc. (Honours)) at the Dept. of Applied Physics and Electronic Engineering (APEE), University of Rajshahi, Rajshahi-6205, Bangladesh.

Personal Informations

Father's name:	Md. Zomsed Ali
Mother's name:	Most. Rekha Begum
Place and Date of Birth:	Puthia, Rajshahi, 31 December 1984
Nationality:	Bangladeshi (By Birth)
Sex:	Male
Religion:	Islam
Marital status:	Married
Blood group:	B+ (B +ve)
Permanent address:	Village: Dighalkandi, Post: Holidagachi-6271, Police Station: Puthia, District: Rajshahi.
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References

1 **Dr. Tetsuya Shimamura**
Professor
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