

CONTACT INFORMATION	Assistant Professor Institute of Information Technology Jahangirnagar University Savar, Dhaka-1342 Bangladesh	Mobile: +880-1711-93-2323 Fax: +880-2-779-1052 E-mail: mskaiser@juniv.edu WWW: www.mshamimkaiser.webnode.com
RESEARCH INTEREST	Next Generation Mobile Communication, Bio-inspired Wireless Network, Cognitive Cooperative Communication, Radio Resource Allocation, Optical-Wireless Communication, Renewable Energy Technology.	
EDUCATION	<p>Asian Institute of Technology (AIT), Pathumthani, Thailand</p> <p>Ph.D, Telecommunication Engineering, School of Engineering and Technology, June 2010 GPA: 3.88 (4.0 scale)</p> <ul style="list-style-type: none"> • Thesis Topic: NF-based Relay Selection and Resource Allocation in Cognitive Cooperative Network • Adviser: Professor Kazi M. Ahmed • Area of Study: Telecommunication Engineering <p>University of Dhaka, Dhaka-1000, Bangladesh.</p> <p>M.S., Applied Physics Electronics and Communication Engineering, June 2005 Class: 1st Class</p> <ul style="list-style-type: none"> • Thesis Topic: Grid Connected Photovoltaic System for Bangladesh • Adviser: Professor Rezaul Karim Mazumder • Co-adviser: Professor Subrata Kumar Aditya • Area of Study: Renewable Energy <p>B.Sc., Applied Physics Electronics and Communication Engineering, June 2002 Class: 1st Class</p> <ul style="list-style-type: none"> • Thesis Topic: Design and Implementation of Stand Alone Photovoltaic Power System for Bangladesh. • Adviser: Professor Rezaul Karim Mazumder • Co-adviser: Professor Subrata Kumar Aditya • Area of Study: Renewable Energy <p>Notre Dame College, Dhaka, Bangladesh</p> <p>HSC, Science Group, Dhaka Board, June 1996 Division: 1st Division with 79.5%</p> <p>Government Muslim High School , Chittagong, Bangladesh</p> <p>SSC, Science Group, Comilla Board, June 1992 Division: 1st Division with 83.7%</p>	
TEACHING EXPERIENCE	<p>Institute of Information Technology, Jahangirnagar University, Dhaka, Bangladesh</p> <p><u>Assistant Professor</u> December 2011 to till now</p> <ul style="list-style-type: none"> • Courses Conducted: IT 309: Signal and System; IT 401: Data Communication and Computer Network; IT: Telecommunication Systems, IT 1106: Electrical Circuit Lab; Artificial Neural Network Lab; Data Communication and Computer Network Lab, IT 1101: Information Technology Fundamentals. 	

- Member, PhD Examination Committee, January 2014 to December 2014.
- Member, Masters Examination Committee, January 2014 to December 2014.
- Chairman, 4th Year Examination Committee, January 2013 to December 2014.
- Chairman, 1st Year Examination Committee, January 2012 to December 2012.
- Editor, JU Journal of Information Technology (JIT)(March 2012 to till now).

Applied Physics and Electronics, Mathematics and Natural Science (MNS), BRAC University, Dhaka, Bangladesh

Assistant Professor

January 2011 to December 2011

(sample graded material and student evaluations available upon request)

- Spring 2010(Part-time).
 - Courses Conducted: PHY 111: Principles of Physics I
 - Student Evaluation:
- Fall 2011
 - Courses Conducted: PHY 111: Principles of Physics I, APE: 103 Electrical Circuits, APE: 102 Heat and Thermodynamics, Statistical Physics
 - Student Evaluation:
- Summer 2011
 - Courses Conducted: PHY 111: Principles of Physics I, PHY 115: Electricity and Magnetism
 - Student Evaluation:
- Spring 2011
 - Courses Conducted: PHY 111: Principles of Physics I
 - Student Evaluation:
- Courses Conducted: PHY 111: Principles of Physics I, PHY 112 Physics II: Principles of Physics II, Digital Electronics, APE: 102 Heat and Thermodynamics, Statistical Physics, PHY 115 Electricity and Magnetism, and APE 103 Electrical Circuits I.
 - Courses Conducted: PHY 111: Principles of Physics I, PHY 112 Physics II: Principles of Physics II, Digital Electronics, APE: 102 Heat and Thermodynamics, Statistical Physics, PHY 115 Electricity and Magnetism, and APE 103 Electrical Circuits I.
 - Convener, Examination Committee, Spring 2012.
- Convener, Examination Committee, Spring 2012.

Electrical and Electronic Engineering, Eastern University, Dhaka, Bangladesh

Assistant Professor and Program Coordinator

August 26 to Jan. 15, 2011

- Conducted Courses: Physics I, Physics II, Digital Communications, Signal and Linear Systems.
- Conducted Thesis: Average Transmit Power Reduction in OFDM-based Indoor Wireless Optical Communications

Electrical Electronics and Communication Engineering, Military Institute of Science and Technology (MIST), Dhaka, Bangladesh

Assistant Professor (Part-time)

July 2010 to till now

- July 2010 (Level 3 Term 2)
 - EECE 309: Communication Theories EECE 310: Communication Theories Lab
- January 2011 (Level 3 Term 1)
 - EECE 301: Signal and Linear System; EECE 435: Microwave Engineering Lab
 - Conducted Thesis (Proposal): Performance Evaluation of Network Coded Cognitive Radio Networks.

- July 2011 (Level 3 Term 2)
 - EECE 309: Communication Theories; EECE 310: Communication Theories Lab
 - Conducted Thesis (Submitted): Performance Evaluation of Network Coded Cognitive Radio Networks.
- January 2012 (Level 3 Term 1)
 - EECE 305: Instrumentation and Measurement; EECE 435: Microwave Engineering Lab
 - Conducted Thesis (Proposal): Intelligent Transportation System for Bangladesh.
- July 2012 (Level 3 Term 2)
 - EECE 310: Communication Theories Lab (2 sections)
 - Conducted Thesis (Proposal): Intelligent Transportation System for Bangladesh.

Asian Institute of Technology, Thailand

Teaching Assistantship, Telecommunications

August 2009 to May 2010

- AT77.01(3 credits) Telecommunication Networks
 - Duration: August-December 2009
 - Responsible for conducting lectures (8 Hours), tutorials (20 hours), preparing and grading assignments and quizzes for Masters and Ph.D students.
 - Developed hundreds of pages of supplementary course material.
- AT77.07(3 credits) Cellular Mobile Systems
 - Duration: January-May 2010
 - Responsible for conducting lectures (10 Hours), tutorials (16 hours), preparing and grading assignments and quizzes for Masters and Ph.D students.
 - Developed hundreds of pages of supplementary course material.

Training and Instrumentation Division (Former ISI), University Grants Commission of Bangladesh, Dhaka, Bangladesh

Lecturer, Telecommunication Engineering

February 20 to August 10, 2007

- Conducted Courses: Data Communication and Computer Networking, Communication I & II, Digital Electronics, Fundamentals of Communications.

Electronics & Telecommunication Engineering, Daffodil International University, Dhaka, Bangladesh

Lecturer

May 19, 05 to Nov. 19, 06

- Data Communication with Lab (ETE), Computer Networking with Lab (ETE), Electrical Machines (ETE), Analog Electronics (CS), Instrumentation and Control with Lab (CSE), Physics I (ETE/CSE/CIS/TEX), Satellite and Digital Communication (ETE), Electronics I (ETE) and Electronics II (ETE).
- **Student evaluation in all courses is overwhelmingly positive over greater than 97 %.**
- Member Secretary, DIU Journal of Science and Technology.

PROFESSIONAL
RESEARCH
EXPERIENCE

Tohoku University, Sendai, Japan

Special Research Student

July 2008 to September 2008

- Funding: Tohoku University Global COE Program
 - “Relay Selection Algorithm for the OFDM-based Cooperative Networks”
 - Supervisor : Professor Fumiyuki Adachi

Applied Physics Electronics & Communication Engineering, University of Dhaka, Dhaka, Bangladesh

Research Associate

June 2005 to September 2007

- Project Title: Development of roof-top Grid-connected PV Power System for Renewable Energy Research Center (RERC), Dhaka University.
- Project Director: Professor Rezaul Karim Mazumder.
- Financed by Ministry of Science & Information and Communication Technology, Government of the People's Republic of Bangladesh with the technical collaboration of Dept. of Applied Physics Electronics and Communication Engineering, University of Dhaka, Tel: 880-2-8614594, Fax: 880-2-8619606.
- Design and Implementation of 1.5 kW grid connected system. This is the first successful Grid-connected PV system in South Asia.

Renewable Energy Research Center, University of Dhaka, Dhaka, Bangladesh

Research Fellow

February 01, 2005 to May 31, 2005

- Project Title: Solar and Wind Energy Resources Assessment (SWERA)
- Estimate Solar and Wind energy resources with 3 km resolution.
- Financed by United Nation Environment Program (UNEP) with the technical collaboration of Renewable Energy Research Center (RERC), Energy Park, University of Dhaka, Dhaka, Tel: +88-02-9677125.

Research Fellow

January 01, 2004 to December 31, 2004

- Project Title: Roof-top Grid-connected Photovoltaic Power System for Homes.
- Designing and Financial Analysis of Roof-top Grid-connected Photovoltaic Power System for Homes.
- Financed by University of Dhaka, Dhaka-1000.

RESEARCH
PROJECT

Jahangirnagar University, Dhaka, Bangladesh

Principle-investigator

July 2014 to June 2015

- Project Title: Design and Implementation of Deserter Warning System for Bangladesh Using WSN.
- Financed by Ministry of Science and Technology, Government of the People's Republic of Bangladesh.

Jahangirnagar University, Dhaka, Bangladesh

Co-investigator

July 2013 to June 2015

- Project Title: Design and Implementation of Grid Connected Solar Water Pumping System for Bangladesh.
- Financed by Ministry of Education, Government of the People's Republic of Bangladesh.

Jahangirnagar University, Dhaka, Bangladesh

Project Director

June 2013 to July 2014

- Project Title: Financial Feasibility and Performance Evaluation of Solar Powered Rickshaw
- Financed by University Grant Commission (UGC) of Bangladesh

Jahangirnagar University, Dhaka, BangladeshCo-investigator**July 2013 to June 2014**

- Project Title: Design and Implementation of Solar Power Boat.
- Financed by Jahangirnagar University

Jahangirnagar University, Dhaka, BangladeshProject Director**June 2013 to July 2014**

- Project Title: Solar Powered Wheel-chair for Physically Challenged People.
- Financed by Jahangirnagar University

Institute of Information Technology, Jahangirnagar University, DhakaProject Director**July 2012 to till now**

- Project Title: Design and Implementation of Solar Power Tricycle Driving Circuit
- Funding: Ministry of Science and Technology

BOOKS

- [1] M. Shamim Kaiser, M. Arifur Rahman, Abu M Jafor Alam, A. K. M. Fazlul Haque FUNDAMENTALS OF COMMUNICATION. Reviewed By Dr. M. Lutfar Rahman, Professor, CSE, Dhaka University, Systech Publication Ltd, February 2007.
- [2] M. Shamim Kaiser, Relay Selection and Resource Allocation in CRN: A Neuro-Fuzzy Based Approach, LAP, Germany, ISBN: 978-3-8484-9361-6
- [3] M. Lutfar Rahman, M. Arifur Rahman, M. Shamim Kaiser, and Md. Alamgir COMPUTER FUNDAMENTALS. Second Edition (in Press), Systech Publication Ltd, February 2015.

REFEREED
JOURNAL
PUBLICATIONS

- [4] M. Shamim Kaiser and K. M. Ahmed, Neuro-Fuzzy Selection Algorithm for Optimal Relaying in OFDM System. IEIEC Journal of Communication. Japan (Article in press)
- [5] M. Shamim Kaiser and A. R. Siddique , "Financial Feasibility and Performance Analysis of Micro-Controller Based Solar Powered Auto-rickshaw". Int. J. of Energy Technology and Policy (IJETP) (Article in press)
- [6] Shamim Al Mamun, **M. Shamim Kaiser**, Muhammad R Ahmed, Md. Shafiqul Islam and Md. Imdadul Islam, Performance Analysis of Optical Wireless Communication System Employing Neuro-Fuzzy Based Spot-Diffusing Techniques, Journal of Communication and Networks, PP. 260-265, Vol.5 No.3B, September 2013. ISSN Online:1947-3826, ISSN Print: 1949-2421, Indexed by Thomson Reuters (ISI).Scientific Research organization, China, September 2013.
- [7] **M Shamim Kaiser**, Shamim Al Mamun and K M Ahmed, "Interference Temperature Constraints-based Radio Resource Allocation for the Network Coded Cognitive Cooperative Network (NCCCN)", International Journal of Computer Applications, Vol 37, USA, 2013.
- [8] **M Shamim Kaiser**, A. R. M. Siddique "Optimal Hybrid Option Analysis for a Remote Location in Bangladesh", International Journal of Advanced Renewable Energy Research (IJARER), peer-reviewed journal, Publisher: U.S. SCIENCE PRESS, ISSN: 2251-9408, Vol-2, issue- 2, pp- 777-784, 2013.
- [9] **M Shamim Kaiser**, K M Ahmed, Neuro-Fuzzy Based Opportunistic Spectrum Access and Hand off for the Cognitive Cooperative Network, Inderscience Journal of Communication and Distributed Networking(IJCDN) Vol 8, No 3, p. 286-306, (2012).

- [10] Md. Samee Ullah Chowdhury, Shamit Chakraborty, Tanveer Arif Nipu and **M. Shamim Kaiser**. Dynamic Radio Resource Allocation for Macro-Femto Hybrid Cellular Network Maintaining Fairness. *Network and Communication Technologies, Canadian Center of Science and Education, Canada, Vol 1, No 1, p.67-71, (2012).*
doi:10.5539/nct.v1n1p67
- [11] Zannatul Ferdous Smriti, **M. Shamim Kaiser** and Kazi M. Ahmed, Dynamic Interference Management For OFDM-based Joint Macro-Femto Cellular Networks. *Journal of Network and Communication Technologies, Canadian Center of Science and Education, Canada, Vol 1, No 1, p. 103-106, (2012).*
doi:10.5539/nct.v1n1p103
- [12] **M. Shamim Kaiser** and K. M. Ahmed. Radio Resource Allocation for Heterogeneous Services in Relay Enhanced OFDMA Systems. *Journal of Communications, Academy Publications, Finland, Vol 5, No 6 (2010), 447-454, (2010).*
- [13] **M. Shamim Kaiser** and K. M. Ahmed, Neuro-Fuzzy (NF) based Relay Selection and Resource Allocation for Cooperative Networks. *ECTI Transactions on Electrical, Electronics, and Communications (ECTI-EEC), Thailand.*
- [14] **M. Shamim Kaiser**, M. Arifur Rahman, M. Mostafizur Rahman. Renewable Energy based Base Transceiver System (BTS) for Remote Location in Bangladesh, *Journal of Water and Material Engineering, India, Vol. 2(1), 2008*
- [15] **M. Shamim Kaiser**, Md. Ezharul Islam, Md. Raihan Jamil, Capacity And Coverage Calculation Model For The UMTS, *Journal of Computer Science, Vol. 1(1), pp: 1-5, June 2007.*
- [16] **M. Shamim Kaiser**, S. K. Adyita, and R.K. Mazumder, Performance Evaluation of a Solar Module using Computer-aided Ray Tracing Technique, *Journal of Engineering and Applied Science, Vol. 1(2), 2006, pp- 82-86,006, ISSN: 1816-949X*
- [17] **M. Shamim Kaiser**, Fuzlul Haque, S A Sharna, M. N. Sultana, M. M. Rahman and S K Aditya, Low Cost Digital Solar Insolation Meter, *Daffodil Journal of Science and Technology, Vol. 1 (1), pp:35-37, 2007.*
- [18] **M. Shamim Kaiser**, S. K. Adyita, and R.K. Mazumder, Design and Simulation of Fuzzy Based Maximum Power Point Tracker. *Dhaka University Journal of Science, University of Dhaka, Vol. 54(2), pp: 213-218, 2006, ISSN: 1022-2502*
- [19] **M. Shamim Kaiser**, S. K. Adyita, and R.K. Mazumder, 2006 Performance Evaluation of a Artificial Neural Network based Maximum Power Point Tracker (MPPT) for Solar Electric Vehicle *Daffodil Journal of Science and Technology Vol. 1 Issue 1 pp:37-40*
- [20] Asif Anwar, **M. Shamim Kaiser**, S. K. Adyita, and R.K. Mazumder, A Supercapacitive Multilayer Voltage Source Inverter for Photovoltaic System. *Dhaka University Journal of Science, University of Dhaka, Vol. 54(2), pp:197-200, 2005 ISSN: 1022-2502*
- [21] **M. Shamim Kaiser**, M Arifur Rahman, M M Rahman, Fazlul Haque, S K Aditya, Hybrid Option Analysis for Power system in Saint Martin's Island, *Journal of Engineering and Applied Science, Vol. (1) Issue. 3, 2006, ISSN: 1816-949X*
- [22] **M. Shamim Kaiser**, S. K. Adyita, and R.K. Mazumder, Low power lighting system for rural household. *Journal of the Bangladesh Electronics Society, Vol. 5(1), pp 71-75, June 2005, ISSN: 1816-1510*

- [23] **M. Shamim Kaiser**, S. K. Adyita, and R.K. Mazumder, A Predictive Digital Filter based Zero Crossing Detection Technique for PV Inverters Journal of Bangladesh Electronics Society, Vol. 5(1), pp 125-128, June 2005, ISSN: 1816-1510
- [24] Susmita Anwar Sharna, **M. Shamim Kaiser**, and S. Rafique, Chaos in Silicon Solar Cell- An analysis for better efficiency. Journal of the Bangladesh Electronics Society, Vol. 5(1), pp 37-42, June 2005, ISSN: 1816-1510.
- [25] **M. Shamim Kaiser**, A K M Fazlul Haque, S K Aditya and R K Mazumder, Fuzzy Logic Based Grid-connected Photovoltaic Power system, Journal of the Bangladesh Electronics Society. Vol 5(2), 2006 ISSN: 1816-1510
- [26] A K M Fazlul Haque, Amin Ahasan Ali, **M Shamim Kaiser**, Analysis and Investigation of a High Performance Intelligent Network using a UNIX-based tool, Journal of the Bangladesh Electronics Society Vol 5(2), 2006, ISSN: 1816-1510.
- [27] **M. Shamim Kaiser**, Asif Anwar, S. K. Adyita, and R.K. Mazumder, Financial Analysis of a Roof-top grid-connected PV system in Dhaka. Journal of Science, University of Dhaka, Vol. 54(2), pp:157-162, July 2006, ISSN: 1022-2502
- [28] **M. Shamim Kaiser**, Suraiya Pervin, S. K. Aditya and R. K. Mazumder, A Predictive Digital Filter Based Zero-Crossing Detection Technique for PV Inverters The Journal of Bangladesh Electronics Society, Vol. 5, No. 1, June 2005, pp. 125 - 128.

SUBMITTED
JOURNAL
PUBLICATIONS

- [29] **M. Shamim Kaiser** and Fariha Afsana, Multi-Priority and Trusted Multi-Path Selection Algorithm for Ad-hoc Network with Outage Probability Approximation. Journal of Ad Hoc Networks. Elsevier[Status:Under Review].
- [30] **M. Shamim Kaiser** and ABM Raihan Siddique, Financial Feasibility and Performance Analysis of Micro-Controller Based Solar Powered Auto-rickshaw. Int. J. of Energy Technology and Policy (IJETP). InderScience[Status:Under Review].

CONFERENCE
PAPERS
(PEER-REVIEW)

- [31] Sumon Biswas, **M. Shamim Kaiser** and Shamim Al Mamun, Applying Ant Colony Optimization in Software Testing to Generate Prioritized Optimal Path and Test Data, ICEEICT 2015, Dhaka, IEEE Conference Publication, 21-23 May 2015.
- [32] Nusrat Z Zenia, **M. Shamim Kaiser**, M R Ahmed, S. A. Mamun, An Energy Efficient and Reliable Cluster-based Adaptive MAC protocol for UWSN, ICEEICT 2015, Dhaka, IEEE Conference Publication, 21-23 May 2015.(ICEEICT Best Paper Award)
- [33] Md. Alomgir Kabir and **M. Shamim Kaiser**, Outage Capacity Analysis of MC-CDMA based on Cognitive Radio Network, ICEEICT 2015, Dhaka, IEEE Conference Publication, 21-23 May 2015.
- [34] Saoreen Rahman, Nilufar Yeasmin, Mahtab Uddin Ahmmed, M. Shamim Kaiser, Adaptive Route Selection Support System Based On Road Traffic Information, ICEEICT 2015, Dhaka, IEEE Conference Publication, 21-23 May 2015.
- [35] Muhammad Raisuddin Ahmed, Mohammed Aseeri, M Shamim Kaiser, Nusrat z Zenia, A Novel Algorithm for Malicious Attack Detection in UWSN, ICEEICT 2015, Dhaka, IEEE Conference Publication, 21-23 May 2015.
- [36] Md.Torikur Rahman, Md.Julkar Nayeem Mahi, **M. S. Kaiser**, S. A. Mamun, Performance Evaluation of a Portable PABX System Through Developing New Bandwidth Optimization Technique, ICEEICT 2015, Dhaka, IEEE Conference Publication, 21-23 May 2015.

- [37] Sumon Sarkar, **M. S. Kaiser** and Shamim Al Mamun, "Cloud based healthcare application architecture and electronic medical record mining: An integrated approach to improve healthcare system", ICCIT 2014, IEEE Conference Publication, December 2014, Dhaka
- [38] Fariha Afsana, Nusrat Z. Zenia **M. S. Kaiser** and Shamim Al Mamun, "Performance Analysis of LDPC coded Wireless Ad-hoc Network for Emergency Response Communications", ICCIT 2014, IEEE Conference Publication, December 2014, Dhaka
- [39] Fariha Afsana, Nusrat Z. Zenia, Nazia Islam, Farhana A. Sunny, **M. Shamim Kaiser** and Shamim Al Mamun., "Multi-Priority and Trusted Multi-Path Selection Algorithm for Ad Hoc Network", International Conference on Electrical Engineering and Information & communication Technology 2014 (ICEEICT-2014), Dhaka, Bangladesh, IEEE Conference Publication, 10-12 April, 2014. This paper has received Prof. Haroon-ur-rashid Best Paper Award.
- [40] Md.Ebrahim Hossain, Taskin Noor Turna, Sultana Jahan Soheli and **M. Shamim Kaiser**, "NF-based Adaptive Flood Warning System for Bangladesh", IEEE International Conference on Informatics, Electronics and Vision (ICIEV) 2014, Dhaka, Bangladesh, IEEE Conference Publication, 23-24 May, 2014.
- [41] Arijet Sarker, Nasrin Fatema, Bratati Roy Binti and **M. Shamim Kaiser**, "Performance Evaluation of Energy Efficient Routing Algorithm for Ad-hoc Network", International Conference on Electrical Engineering and Information & communication Technology 2014 (ICEEICT-2014), Dhaka, Bangladesh, IEEE Conference Publication, 10-12 April, 2014.
- [42] Sabira Khanam, Maliha Mahbub, Anuradha Mandal and **M. Shamim Kaiser**, "Improvement of RFID Tag Detection Using Smart Antenna For Tag Based School Monitoring System", International Conference on Electrical Engineering and Information & communication Technology 2014 (ICEEICT-2014), Dhaka, Bangladesh, IEEE Conference Publication, 10-12 April, 2014.
- [43] A. R. M. Siddique, **M. Shamim Kaiser**, "Performance Evaluation of a Microcontroller-based Solar Powered Auto-rickshaw", International Conference on Electrical Engineering and Information & communication Technology 2014 (ICEEICT-2014), Dhaka, Bangladesh, IEEE Conference Publication, 10-12 April, 2014.
- [44] A. R. M. Siddique, A. A. Khondokar, M. N. H. Patoary, **M. Shamim Kaiser**, "Financial Feasibility Analysis of a Microcontroller Based Solar Powered Rickshaw", International Conference on Electrical Information and communication Technology (EICT-2013), KUET, Khulna , Bangladesh, IEEE Conference Publication, 19-21 December, 2013.
- [45] Abu Raihan Mohammad Siddique, Nasim Ben Zafar , SM Sayeedur Rahman, **M. Shamim Kaiser**, "Solar-based Rickshaw Ambulance for the Remote Areas for Developing Countires", 1st International Conference on Artificial Intelligence, Modeling and simulation (AIMS-2013), Kota Kinabalu, Sabah, Malaysia, IEEE Conference publication, pp- 342-345, 03-05 December, 2013
- [46] **M. Shamim Kaiser**, R. C. Sinha and S K Aditya, Optimal Hybrid Option Analysis for SHS for Kutubdia. International Conference on Engineering Research, Innovation and Education (ICERIE) 2013, Dhaka.
- [47] **M. Shamim Kaiser**, S. A. Mamun and Kazi M. Ahmed, Performance Analysis of ANC based MIMO Cooperative Relaying Network over Nakagami m Fading Channel. IEEE ICICE 2012, Dhaka.

- [48] **M. Shamim Kaiser** and R. C. Sinha, "Financial Feasibility of Micro-controller based Solar Powered Rickshaw for Bangladesh", Progress and Prospect on Physics, Bangladesh Physical Society, March 2013.
- [49] Md. Asif Iqbal, Adiba Zahin, Zainu Sadia Islam and M. Shamim Kaiser, Neuro-Fuzzy Based Adaptive Traffic Flow Control System . International Conference on Communications, Devices and Intelligent Systems (CODIS), December 28 & 29, 2012, Kolkata, India.
- [50] Md. Asif Iqbal, Adiba Zahin, Zainu Sadia Islam and **M. Shamim Kaiser**, Fuzzy Logic based Intelligent Transportation System for Bangladesh. Annual Conference and Seminar on Electronics and ICT for National Development, Bangladesh Electronics Society, October 2012, Dhaka.
- [51] Z Ferdous, **M Shamim Kaiser**, Kazi M Ahmed. Dynamic Interference Management For OFDM-based Joint Macro-Femto Cellular Networks International Conference on Informatics, Electronics and Vision, (ICIEV12). Center for Natural Sciences and Engineering Research (CNSER),2012 Japan.
- [52] M S Ullah Chowdhury, S Chakraborty, T Arif, **M Shamim Kaiser**. A Fair Radio Resource Allocation For Multiservice Macro-Femto Hybrid Cellular Network, ECTI-CON 2012 ECTI Thailand: IEEE
- [53] **M. Shamim Kaiser** and Kazi M. Ahmed, Power Allocation for the Network Coded Cognitive Cooperative Network. IEEE WiCOM 2011, China.
- [54] **M. Shamim Kaiser**, Arif Iqbal, and K. M. Ahmed, Performance Evaluation of a Network-coded Dual-hop OFDM Network. IEICE 2010, BUET, Dhaka, Bangladesh.
- [55] Muhammad Zubair Farooqui, Poompat Saengudomlert and **M. Shamim Kaiser**, Average Transmit Power Reduction in OFDM-based Indoor Wireless Optical Communications Using SLM. IEICE 2010, BUET, Dhaka, Bangladesh.
- [56] **M. Shamim Kaiser** and K. M. Ahmed, Power Allocation in OFDM-Based Cognitive Relay Networks. IEEE International Conference on Wireless Communications, Networking and Information Security (IEEE WCNIS 2010), China, 2010.
- [57] **M. Shamim Kaiser** and K. M. Ahmed, Neuro-Fuzzy (NF) based Relay Selection and Resource Allocation for Cooperative Networks. IEEE ECTI-CON 2010, Chiang Mai, Thailand, 2010.
- [58] Samad Baseer, Ibrahim Channa, **M. Shamim Kaiser**, Kazi Ahmed, Reliable and Optimal Relay Selection for the Cellular Cooperative Diversity System Under Rayleigh Fading Channel. Wireless Personal Multimedia Communications (WPMC) 2010, Brazil.
- [59] Samad Baseer, Ibrahim Channa, **M. Shamim Kaiser**, Kazi Ahmed, Heterogenous Networks Architectures and Their Security Weaknesses. IEEE International Conference on Intelligence and Information Technology 2010, (ICIIT 2010) , Pakistan.
- [60] **M. Shamim Kaiser**, I. Khan F. Adachi and K. M. Ahmed, Fuzzy Logic Based Relay Selection Algorithm for the Cooperative Networks. IEEE COMNETS 09, pp: 251-257, Bangalore, India, 2009.
- [61] **M. Shamim Kaiser**, R. Ali Shah and K. M. Ahmed, Fuzzy Logic Based Opportunistic Spectrum Access and Spectrum Handoff for OFDM based Cognitive Radio Networks. WPMC 09, Sendai, Japan, 2009.

- [62] **M. Shamim Kaiser** and S. K. Aditya, Head Control of a Photovoltaic Pump System Using Artificial Neural Network, IASTED International Conference on Power & Energy Systems (AsiaPES 2007) Phuket, Thailand, 2007.
- [63] **M. Shamim Kaiser**, Muhibul Haque Bhuyan, Fuzlul Haque, S. A. Sharna & M. N. Sultana, Cost effective digital solar insolation meter, Dhaka, Bangladesh, pp 397-400, 2005, ISBN - 984-32-2873-1.
- [64] **M. Shamim Kaiser**, A. Anwar, S. K. Aditya, and R. K. Mazumder Financial Feasibility and of a Roof-top grid-connected PV system in Dhaka. This paper is presented in International Congress on Renewable Energy (ICORE)-2005. Pune, India, 2005.
- [65] Anwar Asif, **M. Shamim Kaiser**, Mazumder R.K., Aditya S.K., A Supercapacitive Multilevel Voltage Source Inverter for Photovoltaic System, Proceedings, First International Conference on Renewable Energy, October 2004, New Delhi, pp. DE-125.
- [66] **M. Shamim Kaiser**, A. Anwar, S. K. Aditya, and R. K. Mazumder, Research and Utilization of Renewable Energy resources in Bangladesh, First international Conference- Environmentally Sustainable Development, COMSATS Institute of Information, Abbottabad, Pakistan, 2005.
- [67] **M. Shamim Kaiser**, S. K. Aditya, and R. K. Mazumder, Low Power Lighting System and its Cost Analysis” Proceedings of the Regional Workshop Renewable Energy Progress and Prospect, pp -121-125, Dhaka, Bangladesh, February 2004.

GRANTS

Ministry of Science, and Technology Support Grant

Topic: “Design and Implementation of Deserter Warning system for Bangladesh using WSN”,

Research Grant: BDT 3,00,000,

Duration: July 1, 2014 to June 31, 2015.

Ministry of Education Support Grant

Topic: “Design and Implementation of Grid-connected Solar Pumping System for Bangladesh”,

Research Grant: BDT 18,00,000,

Duration: July 1, 2013 to June 31, 2015.

Ministry of Science, and Information and Communication Technology Support Grant

Topic: “Microcontroller based Solar Powered Tricycle”,

Research Grant: BDT 1,00,000,

Duration: July 1, 2012 to June 31, 2013.

University Grant Commission of Bangladesh ,

Topic: “Intelligent Transportation System for Dhaka”,

Research Grant: BDT 20,000,

Duration: July 1, 2012 to June 31, 2013.

REFEREE SERVICE

- Member of reviewer panel for Journal of Wireless Personal Communications [Ref. <http://wire.edmgr.com/>]
- Member of reviewer panel for International Journal of Advanced Computer Science and Applications
- Member of reviewer panel for Bahria University Journal of Information & Communication Technologies (BUJICT) [Ref. <http://bujict.bimcs.edu.pk/>]

- Member of reviewer panel for The 21st International Conference on Neural Information Processing (ICONIP2014)
[Ref. <http://iconip2014.org/>]
- Member of reviewer panel for International Conference on Electrical, Information & Communication Engineering (ICEICE) 2014
[Ref. <http://www.buet.ac.bd/>]
- Member of reviewer panel for International Conference on Electrical, Information & Communication Engineering (ICEICE) 2014
[Ref. <http://www.buet.ac.bd/>]
- Member of reviewer panel for International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT) 2014
[Ref. <http://www.iceeict.org/>]
- Member of reviewer panel for International Conference on Electrical and Information & Communication Technology (EICT) 2013
[Ref. <http://www.eict.org/>]
- Member of reviewer panel for (WSEAS) Transection on Communication 2012 – now
[Ref. <http://www.wseas.org/>]
- Served as a Member Secretary of Editorial Board for Daffodil International University Journal of Science and Technology (June 2006- October 2006).
[Ref. <http://www.daffodilvarsity.edu.bd/diujst/>]
- Member of reviewer panel for InSITE (Information Science + Information Technology Education Joint Conference) 2007 to be held on June 22-25,2007, Ljubljana, Slovenia [Ref. <http://2007.informingscience.org/>]
- Member Program committee, InSITE 2005, InSITE 2006, InSITE 2007, Organized by the Informing Science Institute, Eli Cohen (USA) and Elizabeth Boyd (USA),
[Ref: Organizers@InSITE.nu]
- Member of Organizing Committee, DIU 1st Science Olympiad 2006, Organized by Daffodil International University (November 10,2006)
[Ref. <http://www.daffodilvarsity.edu.bd/scienceolympiad/>]
- Member of Program Committee and Publication Committee, National Conference of Cryptography and Information Science (NCCIS 2006), Organized by Daffodil International University (November 04,2006)
[Ref. <http://www.daffodilvarsity.edu.bd/nccis2006/>]
- Member of Organizing Committee, 1st Science Olympiad, Daffodil International University, 2008, Dhaka.
- Member of Organizing Committee, Eastern University Math Olympiad 2011, January 7, 2011, Dhaka.
- Member of Organizing Committee, Inter University Math Olympiad 2011, December 9, 2011, Dhaka.
- Member of Review Committee, IEEE WCNC 2011, IEEE ICC 2011, IEEE GlobeCOM 2011.

JOURNAL AND
CONFERENCE
SERVICE

Technical Co-chair, International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT 2015)
[Ref. <http://www.iceeict.org/>]

Technical Program Committee Member, IEEE 17th International Multi-Topic Conference(INMIC2014)
[Ref. <http://ieee.inmic.org/>]

Technical Secretary, International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT) 2014, Dhaka, Bangladesh.

Editor: “JU Journal of Information Technology (JIT)”, This is a double blind peer reviewed journal annually publish by Institute of Information Technology, Jahangirnagar University, Dhaka, Bangladesh.

Editors, Open Research and Science Library (ORSLib) [Ref.<http://www.orslib.org/Inist/editorialboard.htm>]

Technical Program Committee Member: “Wireless Signal Processing and Networking”, 14th IEEE International Conference on Communication (ICC 2010), Washington, DC, October 5–7, 2010.

STUDENT
ADVISING

Shamim Al Mamun, Ph.D student in Information Technology, Institute of Information Technology, Jahangirnagar University, Dhaka.

Thesis Title: Performance Evaluation of MIMO based Optical Wireless System. Sep 2012– Ongoing.

Nusrat Z. Zenia, Master of Science student in Information Technology, Institute of Information Technology, Jahangirnagar University, Dhaka.

Thesis Title: Performance Evaluation of Underwater Wireless Sensor Network Date of submission: December 2014(On going).

Fariha Afsana, Nazia Islam, Farhana A. Sunny, Bachelor of Science Undergraduate student in Information Technology, Institute of Information Technology, Jahangirnagar University, Dhaka.

Thesis Title: Multi-Priority and Trusted Multi-Path Selection Algorithm for Ad Hoc Network Date of submission: December 2014(On going).

Arijet Sarker, Nasrin Fatema and Bratati Roy. Bachelor of Science Undergraduate student in Information Technology, Institute of Information Technology, Jahangirnagar University, Dhaka.

Thesis Title: Performance Evaluation of Energy Efficient and Reliable Routing Algorithm for WSN. December 2013.

Md.EbrahimHossain, Taskin Noor Turna, Sultana Jahan Soheli. Bachelor of Science Undergraduate student in Information Technology, Institute of Information Technology, Jahangirnagar University, Dhaka.

Thesis Title: Neuro-Fuzzy(NF)-based Adaptive Flood Warning System for Bangladesh . December 2013.

Mohibul Islam Khan, Farah Md. Imtiaz, K. A. Shahal Abdullah. Undergraduate student in Electrical Electronics and Communication Engineering, Military Institute of Science and Technology, Dhaka.

Thesis Title: Performance Evaluation of Optical Wireless Communication For Indoor Applications. December 2013.

Gazi M. Shafiqul Alam, S Akhter, S. Mahmud. Undergraduate student in Electrical Electronics and Communication Engineering, Military Institute of Science and Technology, Dhaka.

Thesis Title: Solar Power Wheel Chair for Physically Challenged People, December 2013.

Md. Asif Iqbal, Adiba Zahin and Zainu Sadia Islam. Undergraduate student in Electrical Electronics and Communication Engineering, Military Institute of Science and Technology, Dhaka.

Thesis Title: Intelligent Transportation System for Dhaka. Jan 2012– Dec 2012.

Zannatul Ferdous Smriti. Undergraduate student in Electrical and Electronic Engineering.

Thesis Title: Dynamic Interference Management for OFDM based Joint Macro-Femto Cellular Networks. 2012.

Tanveer Arif, Samit Chakraborty and Md. Samee Ullah Chowdhury, Undergraduate students in Electrical and Electronic Engineering, BRAC University, Dhaka.

Thesis Title: A Fair Radio Resource Allocation For Multiservice Macro-Femto Cellular Network. 2012.

Md. Sumon. Undergraduate students in Electrical Electronics Engineering, Eastern University, Dhaka.

Thesis Title: Average Transmit Power Reduction in OFDM-based Indoor Wireless Optical Communication, September 2010–April 2012.

Chanchal Saha. Undergraduate students in Electrical Electronics and Communication Engineering, Military Institute of Science and Technology, Dhaka.

Thesis Title: Coverage and capacity optimization of Wireless Network using Bluetooth Technology. Jan 2007– Dec 2007.

Zehan T. Alam Undergraduate students in Computer Science, Daffodil International University, Dhaka.

Thesis Title: Frequency Planning and Capacity utilization of UMTS system for Bangladesh. 2006.

PH.D. THESIS
EXAMINATION
COMMITTEE

Muhammad Sadiq Ali Khan

Thesis Title: Recent Trends in Computer Intrusion Detection System and Network Management Monitoring: A Statistical Modeling Approach, University of Karachi, 2011 (External Examiner)

VOLUNTARY
SERVICES

Coordinator, Student Activities, IEEE Bangladesh Section (Year: 2015)

Counselor, IEEE Student Branch, Jahangirnagar University (Year: 2015)

PROFESSIONAL
MEMBERSHIPS

Member, Institute for Electrical and Electronics Engineers (IEEE), USA. 2009–present

- IEEE Communication Society (2009–present)

Member, Institute of Electronics, Information and Communication Engineers (IEICE), Japan. 2009–present

- IEICE Communication Society (2009–present)

Life Member, National Maritime Institute (NOAMI) 2012–present

Life Member, Bangladesh Physical Society 2012–present

Life Member, Bangladesh Electronics Society 2006–present

Life Member, Bangladesh Solar Energy Society 2006–present

Life Member, Notre Dame Science Club, Notre Dame College 1996–present

Life Member, Notre Dame Nature Study Club, Notre Dame College 1996–present

SERVICE

Recent contributor to several open-source software projects, including:

- Vim-LaTeX suite
- Masters and Bachelor Thesis templates for BRAC University and Military Institute of Science and Technology (MIS)

Frequent contributor to Wikipedia

- Significant contributions to articles on mobile and wireless communication, electronics, and signals and systems.

President, AIT Bangladesh Association, Aug 2007– Aug 2008

PROFESSIONAL
TRAINING

Cisco Certified Network Associate

- CCNA Network Academy Instructor (CCAI)

Certified Wireless Network Administrator

- CCNA Network Academy Instructor Exploration 3 and 4

Advanced Embedded System Design

- Pi-Lab, December 30, 2013 – January 30, 2014

Embedded System Design

- Basic Training on Embedded System Design

Teaching and Learning Center Working 2011 (Jan 02 to Jan 06, 2011), Savar Campus, BRAC University.

Certificate Course on PLC & Frequency Inverter Troubleshooting.(June 2007), Organized by UGC of Bangladesh.

Certificate Course on Mobile Communication Technology (December 02 to December 05, 2005), Organized by CICT of North South University.

AWARDS

Tohoku University, Sendai, Japan

- Special Research Fellowship, Wireless Signal Processing and Networking Laboratory item Period: July-September 2008

Asian Institute of Technology

- AIT Fellowship, 2007–2010

University of Dhaka

- Board Scholarship, 1997–2001

Notre Dame College, Dhaka, Bangladesh

- Honorable Mention, 2006

LANGUAGE
PROFICIENCY

- Bangla: Native
- English: Fluent
- German, Urdu & Hindi: Mid level
- French: Basic

APPLICATION
AREAS

Autonomous/Unmanned Vehicles, Flexible Manufacturing Systems, Distributed Power Generation, Intelligent Lighting, Power Demand Response, Microgrids, Smart Grids

HARDWARE AND
SOFTWARE SKILLS

Analog and Digital Electronics:

- Bipolar and FET implementations of continuous and switched amplifiers, modulators, converters, and filters
- Computer-Aided Design Tools: Cadence OrCAD, NI Multisim, SPICE, pst-circ

Embedded and Real-time Systems:

- Software and hardware development with several MCU and DSP platforms (e.g., Motorola MCU's, Texas Instruments DSP's, Atmel ATmega MCU's, Microchip PIC MCU's, and others)

Instrumentation, Control, Data Acquisition, Test, and Measurement:

- dSPACE hardware (e.g., RTI1104) and Control Desk software, Simulink, LabVIEW and other

Computer Programming:

- C, C++, Qbasic, Pascal, PHP, MATLAB, Maple, Mathematica, and others

MATLAB skill set:

- Linear algebra, Fourier transforms, Monte Carlo analysis, nonlinear numerical methods, polynomials, statistics, N -dimensional filters, visualization
- Toolboxes: communications, control system, filter design, genetic algorithm and direct search, signal processing, system identification, fuzzy, neural network

Information/Internet Technology:

- Networking (UDP, TCP, ARP, DNS, Dynamic routing), Services (Apache, SQL, MediaWiki, POP, IMAP, SMTP, application-specific daemon design)

Productivity Applications:

- $\text{T}_\text{E}\text{X}$ ($\text{L}_\text{A}\text{T}_\text{E}\text{X}$, $\text{B}_\text{I}\text{B}\text{T}_\text{E}\text{X}$, $\text{P}_\text{S}\text{T}\text{ricks}$), Vim, most common productivity packages (for Windows, OS X, and Linux platforms)

Operating Systems:

- Microsoft Windows family, Apple OS X, IBM OS/2, Linux.

EXPERTISE

Mathematics:

- Applied Mathematics, Real and Complex Analysis, Measure Theory, Differential Geometry, Game Theory, Graph Theory, Combinatorics

Control Theory and Engineering:

- Linear and Nonlinear Systems Theory, Feedback, Variable Structure Systems and Sliding Modes, Distributed and Intelligent Control, Dynamic Optimization, Biomimicry, Bioinspiration, Hybrid and CyberPhysical Systems

Communications and Signal Processing:

- Probability, Random Variables, Stochastic Processes, Information Theory, Estimation, Networks

REFERENCES
AVAILABLE TO
CONTACT

PROF. KAZI M. AHMED

Telecommunications Field of Study, School of Engineering and Technology, Asian Institute of Technology, Thailand,
Email: kahmed@ait.ac.th.

PROF. FUMIYAKI ADACHI

Wireless Signal Processing and Networking Lab, Faculty of Science & Information Technology, Tohoku University, Sendai, Japan,
Email: adachi@ecei.tohoku.ac.jp.

PROF. SUBRATA KUMAR ADITYA

Applied Physics Electronics and Communication Engineering, Faculty of Science & Information Technology, Dhaka University, Dhaka, Bangladesh,
Email: aditya@dhakauniv.edu

DECLARATION

I hereby declare that the information furnished above is true to the best of my knowledge and belief