



جامعة العلوم والتقنية في الفجيرة
UNIVERSITY OF SCIENCE & TECHNOLOGY OF FUJAIRAH

CURRICULUM VITAE

PERSONAL INFORMATION

Name: Mohammed Tarique
Nationality: Canada
Job Title: Associate Professor
Marital Status: Married
College: Engineering and Technology
Department: Electrical and Computer Engineering
Date of Birth: 11/02/1968
Moile Number: 0501216446
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EDUCATIONAL BACKGROUND

1. Doctorate

University: University of Windsor
Country: Canada
Date of Obtaining degree: 20/10/2007
Major: Electrical Engineering
Minor: Not Applicable
Title: Cross Layer Design for Hierarchical Routing Protocols for Mobile Ad Hoc Networks

2. Master

University: Lamar University
Country: USA
Date of Obtaining degree: 12/05/2001
Major: Electrical Engineering
Minor: Not Applicable
Title:

3. Bachelor

University: Bangladesh University of Engineering and Technology (BUET)
Country: Bangladesh
Date of Obtaining degree: 06/01/1993

COMPUTER SKILLS

MS Word	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Excel	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Power Point	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Outlook	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
Internet	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced

LANGUAGE SKILLS

Arabic	<input checked="" type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Advanced
English	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
Bengali	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced

PROFESSIONAL EXPERIENCE

From (year)	To (year)	Position	Employer	Country
2011	2019	Associate Professor	University of Science and Technology of Fujairah (Former Ajman University)	UAE

2007	2011	Assistant Professor	American International University	Bangladesh
2003	2007	Graduate Teaching Assistant	University of Windsor	Canada
2003	2007	Graduate Research Assistant	University of Windsor	Canada
1999	2001	Teaching Assistant	Lamar University	USA
1993	1999	Senior Engineering Officer	Beximco Pharmaceuticals	Bangladesh

EDUCATIONAL EXPERIENCE

Academic Year	Course Title	Academic Year	Course Title
2011-2019	Electromagnetic Fields and Wave Propagation	2011-2019	Principles of Communication
2011-2019	Communication and Switching Networks	2011-2019	Digital Signal Processing Signals and Systems
2011-2012	Satellite Communication	2011-2019	Wireless Communication
2011-2019	Microwave Engineering	2007-2011	Analog Electronics I
2011-2019	Digital Communications	2007-2011	Analog Electronics II
2013-2015	Antenna Design	2007-2011	Signals and Systems
2007-2011	Cellular Mobile Communication	2007-2011	Digital Communication
2007-2011	Wireless Communications	2020-2021	Senior Seminar
2020-2021	Engineering Management	2020-2021	Financial Management
2020-2021	Sensors and Instrumentation		

PUBLICATIONS

1. Books

None

2. Book Chapters

None

3. Journal Articles

Rumana Islam and Mohammed Tarique, "Chest X-ray Images to Differentiate COVID-19 from Pneumonia with Artificial Intelligence Techniques, accepted by the International Journal of Biomedical Imaging, Hindawi Publishers

Rumana Islam and Mohammed Tarique, "A novel convolutional neural network based dysphonic voice detection algorithm using chromagram," International Journal of Electrical and Computer Engineering, vol. 12, no. 5, October 2022, pp. 5511-5518

Rumana Islam, Esam Abdel-Raheem, and Mohammed Tarique, "Voice Pathology Detection using Convolutional Neural Networks with Electroglottographic and Speech Signals," *Computer Methods and Program in Biomedicine Update (In-press)*, Elsevier.

Rumana Islam, Esam Abdel-Raheem, and Mohammed Tarique, "A Novel Pathological Identification Technique Through Cochlear Implant Processing System," *Applied Sciences*, MDPI (Switzerland), vol. 12, no. 5, February 2022, pp. 1-21

Rumana Islam, Esam Abdel-Raheem, and Mohammed Tarique, "A Study of using cough sounds and deep neural network for the early detection of COVID-19," *Biomedical Engineering Advances*, Elsevier, vol. 3, June 2022, 100025, pp. 1-12

Rumana Islam and Mohammed Tarique, "A Novel Convolutional Neural Networks based Pathological Voice Detection using Spectrogram and Chromagram," *International Journal of Electrical and Computer Engineering*, vol. 12, no. 5, October 2022, pp. 5511-5518

Mohammed Tarique and Rumana Islam, "Optimum Number of Neighbors for Resource-constrained Mobile Ad Networks," *International Journal of Ad hoc, Sensors, and Ubiquitous Computing*, vol. 12, no. 2, April 2021, pp. 1-14

Rumana Islam, and Mohammed Tarique, "Blind Source Separation Of Fetal ECG Using Fast Independent Component Analysis And Principle Component Analysis," *International Journal of Scientific and Technology Research*, vol. 9, no. 11, pp. 80-95

Rumana Islam, Mohammed Tarique, and Esam Abdel-Raheem, "A Survey on Signal Processing based Pathological Voice Detection Techniques," *IEEE Access*, Vol. 8, April 2020, pp. 66746-66776

Elnour, M. Tarique, D. Foyez, L. Hassan, and A. Rashed, "Location Aware Health Monitoring System for Emergency Cases," *International Journal of Scientific and Technology Research*, vol. 8, no. 21, January 2020, pp. 1247-54,

Mohammed Tarique and Rumana Islam, "*Performances of Ad hoc Networks under Deterministic and Probabilistic Channel Conditions: Cases for Single Path and Multipath Routing Protocols*", *International Journal of Computer Networks and Communications*, Vol. 10, No. 4, July 2018, pp. 1-21

Henok Ali, Momem Odeh, Ahmed Odeh, Ali Abou El-Nour and Mohammed Tarique, "*Unmanned Aerial Vehicular System for Greenhouse Gas Measurement and Automatic Landing*", *Network Protocols and Algorithms*, Vol. 9, No. 3-4, December 31, 2017, pp. 56-75

Mohamed Aboubakr, Ahmed Balkis, Ali-Abou ElNour, and Mohammed Tarique, "*Environmental Monitoring System by Using Unmanned Vehicular System*", *Network Protocols and Algorithms*, Vol. 9, No. 3-4, December 31, 2017, pp. 31-55

Mohammed Tarique, "*Selection of Optimal Beam Forming Algorithm for Mobile Ad hoc Networks*", *Wireless Engineering and Technologies*, Vol. 8, January 24, 2017, pp. 20-36

Hyder Khaleq, Ali Abu El-Nour, and Mohammed Tarique, "*A Reliable Wireless Systems for Water Quality Monitoring and Level Control*", *Network Protocols and Algorithms*, Vol.8. No. 3, October 30,2016, pp. 1-14

Mohammed Tarique, "*Optimum Wavelet Selection for Orthogonal Wavelet Division Multiplex (OWDM) Based Broadcasting System*", *Transactions on Networks and Communications*, Vol. 4, No. 4, July 2016, pp. 1-12

Muna Dahir, Alyaa Obaid, Aisha Ali, Amna Mohammad, Ali Abou ElNour, and Mohammed Tarique, "*Mobile Based Robotic Wireless Path Controller*", *Network Protocols and Algorithms*, Vol.8, No.2, June 2016, pp. 20-38

Mohammed Tarique, "*Performances of Orthogonal Wavelet Division Multiplex (OWDM) System Under AWGN, Rayleigh, and Ricean Channel Conditions*", *International Journal of Computer Networks and Communications*, Vol. 8, No. 3, May 2016, pp. 93-105

Mohammed Tarique and Mussab Saleh Muhammad, "*Window Based Pulse Shaping Techniques for DVB-T System*", *Transactions on Networks and Communications*, Vol.4, No.1, March 2016, pp. 25-37

AKM Arifuzzaman, Rumana Islam, and Mohammed Tarique, "*Window Based Smart Antenna Design for Mobile Ad hoc Networks Routing Protocol*", *International Journal of Wireless and Mobile Networks*", Vol. 7, No. 4, August 2015, pp. 63-80

Abrar Khamies, Shaikhah Rashed, Ali Abou El-Nour, and Mohammed Tarique, "*ZigBee Based Optimal Scheduling for Home Appliances in the United Arab Emirates*", *Network Protocols and Algorithms*, Vol. 7, No. 2, July 31,2015, pp. 60-79

Fatmah ElZahra, Ameenah Hatem, and Mohammed Tarique, “Fourier Transform Based Early Detection of Breast Cancer by Mammogram Image Processing”, Journal of Biomedical Engineering and Medical Imaging, Vol. 2, No. 4, July 2015, pp. 17-32

Amna Abdullah, Asma Ismail, Aisha Rashid, Ali Abou El-Nour, and Mohammed Tarique, “Real Time Wireless Health Monitoring Applications Using Mobile Devices”, International Journal of Computer Networks and Communications, Vol. 7, No. 3, May 2015, pp.13-30

Shaikhul Arefin Khan and Mohammed Tarique, “Minimizing Vibration Effects in Satellite Laser Communication”, International Journal of Multidisciplinary Sciences and Engineering, Vol. 5, No. 11, November 2014, pp. 12-20

Thoraya Obaid, Halimaah Rashid, Abu El-Nour, M. Reehan, M. Saleh, and Mohamed Tarique, “ZigBee Technologies and Its Application in Wireless Home Automation System: A Survey”, International Journal of Networks and Communications, Vol. 6, No. 6, July 2014, pp. 115-131

Khalifa AlSharqi, Abdelrahim Abdelbari, Ali Abou-Elnour, and Mohammed Tarique, “ZigBee based Wearable Remote Healthcare Monitoring System for Elderly People” International Journal of Wireless and Mobile Networks, Vol. 6, No. 3, June 2014, pp. 53-67

A.H. Siddique, AKM Arifuzzaman, Rumana Islam, and Mohammed Tarique, “Performance Study of Coded and Uncoded IEEE 802.16d under Stanford University Interim (SUI) channels”, International Journal of Computer Network and Communications, Vol. 6, No.2, March 2014, pp. 143-158

Thoraya Obaid, Halimaah Rashid, Abu El-Nour, M. Rehan, M. Saleh, and Mohamed Tarique, “ZigBee based Voice Controlled Wireless Smart Home System”, International Journal of Wireless and Mobile Networks, Vol. 6, No. 1, February 2014, pp. 47-59

AKM Arifuzzaman, Rumana Islam, Mohammed Tarique, and Mussab Saleh Hassan “Effects of receiver filters on the performances DVB-T receiver”, International Journal of Wireless and Mobile Networks, Vol. 5, No. 3, June 2013, pp. 103-118

AKM Arifuzzaman, Mussab Saleh, Mohammed Tarique, and Rumana Islam, “Effects of filters on DVB-T receiver performance under AWGN, Rayleigh, and Ricean fading channels”, International Journal of Computer Networks and Communication, Vol. 5, No. 4, July 2013, pp. 87-101

Shaffatul Islam, Adnan Riaz, and Mohammed Tarique, “Performance analysis of routing protocols of mobile ad hoc networks for VoIP applications”, International Journal of Selected Area of Communication, June 2012, pp. 26-33

Abdul Hashib Siddique, AKM Arifuzzaman, and Mohammed Tarique, “Performance study of IEEE 802.16d under Stanford University Interim (SUI) Channel”, International Journal of Computer Networks and Communications, Vol. 5, No.2, 2013, pp. 137-152

Muhammad Shaffatul Islam, Md. Adnan Riaz, and Mohammed Tarique, “Performance Analysis of the Routing Protocols for Video Streaming Over Mobile Ad Hoc Networks”, International Journal of Computer Networks and Communication, Vol.4, No.3, pp. 133-150, 2012

Anwar Hossain and Mohammed Tarique, “Effect of Multi-Path Fading and Multiple Access Interference on Broadband CDMA Systems”, International Journal of Communication Systems, John Wiley, June 24, 2011

Mohammed Tarique, Kemal E. Tepe, Sasan Adibi and Shervin Erfani, “A Survey on Multipath Routing Protocols for Mobile Ad Hoc Network”, Journal of Network and Computer Applications, Vol. 32, No. 6, November 2009, Pages 1125-1143

Mohammed Tarique and Kemal E. Tepe, “Minimum Energy Hierarchical Dynamic Source Routing for Mobile Ad Hoc Network”, Ad Hoc Networks, Vol. 7, No. 6, August 2009, Pages 1125-1135

Mohammed Tarique and Kemal E. Tepe, “A new hierarchical design for Wireless Ad Hoc Networks with Cross Layer Design”, International Journal of Ad Hoc and Ubiquitous Computing, Vol. 2, No. ½, 2007, pp. 12-21

Dhrupad Debnath, Chowdhury Akram, Rumana Islam, and Mohammed Tarique, “*Minimizing Shadowing effects on Mobile Ad hoc Networks*”, International Journal of Selected Area on Telecommunications (IJSAT), October 2011, pp. 46-51

Nadia Nawshin, AKM Arifuzzaman, and Mohammed Tarique, “*Demonstration and Performance ROF based OFDM-PON system for the next generation fiber optic communication*”, International Journal of Computer Networks and Communications, Vol. 4 , No.1, January 2012, pp. 193-209

Nateq Be-Nazir Ibn Minar and Mohammed Tarique,” *Bluetooth Security Threats and Solution: A Survey* ”, International Journal of Distributed and Parallel Processing, Vol. 3, No.1, January 2012, pp. 127-148

Arifuzzaman AKM, Anwar Hossain, Nadia Hossain and Mohammed Tarique, “*A Comparative Performance Analysis of MRC Diversity Receivers in OFDM System*”, International Journal of Distributed and Parallel Systems (IJDPS), Vol.2, No.4, July 2011, pp. 88-101

Mohammed Tarique, Anwar Hossain, Rumana Islam, and C. Akram Hossain,”*Issues of long-hop and short-hop routing in Mobile Ad hoc Networks: A comprehensive study*”, Network protocol and Algorithm, Vol. 2, No. 2, September 2010, pp. 107-131

Nateq Be-Nazir Ibn Minar, and Mohammed Tarique, “*A Secured Bluetooth Based Social networks*”, International Journal of Computer Applications, Vol. 26, No.1, July 2011, pp. 16-22

Naurin Kadir, Ariq I. Aziz, Sarjana Chowdhury, Samiha Shamma, and Mohammed Tarique, “*Minimizing vibration effects of satellite laser communications*”, International Journal of Computer Applications, Vol. 26, No. 6, July 2011, pp. 19-25

Mohammed Tarique and Tanvir Hasan, “*Impact of Nakagami-m Fading Model on Multi-hop Mobile AdHoc Networks*”, International Journal of Computer Applications, Vol. 26, No. 6, July 2011, pp. 5-12

Nepal Narayan and Mohammed Tarique, “*Performance Analysis of MIMO based WiMax System*”, International Journal of Selected Area of Telecommunication, July 2011, pp. 20-25

Shaffatul Islam, Mamunur Rashid, and Mohammed Tarique, “*Performance analysis of WiMax/WiFi system using different Codecs*”, International Journal of Computer Applications, Vol. 18, No. 6, March 2011, pp. 13-19

Md. Anwar Hossain, Mohammed Tarique, and Rumana Islam,” *Shadowing Effects on Routing Protocol of Multihop Ad Hoc Networks*”, International Journal of Sensor, Ad Hoc, Sensor and Ubiquitous Computing, Vol. 1, No. 1, March 2010, pp. 12-28

Mohammed Tarique and Rumana Islam, “*Minimum Energy Dynamic Source Routing Protocol for Mobile Ad hoc Networks*”, International Journal of Computer Science and Network Security, Vol. 7, No. 11, 2008, pp. 304-311

4. Conferences

Rumana Islam, Esam Abdel-Raheem, and Mohammed Tarique, “*Early Detection of COVID-19 Patients using Chromagram Features of Cough Sound Recordings with Machine Learning Algorithm*,” International Conference on Microelectronics, December 19-22, Cairo, Egypt.

Rumana Islam and Mohammed Tarique, “*Classifier based Earl Detection of Pathological Voice*,” International Symposium on Signal Processing and Information Technology, Ajman, December 2019

Dina Jamel, Mohammed Tarique, and Rumana Islam, “*Voice Features Analysis for Early Detection of Voice Disability in Children*”, The IEEE International Conference on Signal Processing and Information Technology, Louisville, KY, USA, USA Louisville, KY, USA, USA

Ali Abou-Elnour; A. Thabt; S. Helmy; Y. Kashf; Y. Hadad; M. Tarique; Ossama Abo-Elnor, “*Integrated wireless sensor network and real time smart controlling and monitoring system for efficient energy management in standalone photovoltaic systems*”, Proceedings of Sensors and Smart Structure Technologies for Civil, Mechanical, and Aerospace System, San Diego, California, March 9, 2014

Nadia Nawshin, A K M Arifuzzaman, Mohammed Tarique and ABM Siddique Hossain, "Demonstration of a Novel OCDMA Based PON System for Next Generation Fiber Optic Communication", Proceedings of the Seventh International Conference on broadband and wireless computing, communication and applications, University of Victoria, Victoria, Canada, November 2012, pp. 573-577

A K M Arifuzzman, Md. Anwar Hossain, Nadia Nowshin, and Mohammed Tarique, "Performance Comparison of Selection Combining Diversity Receivers for different modulation schemes in OFDM System", Proceedings of International Conference on Computer and Information and Information technology (ICCIT 2010), Dhaka, December 2010

Shamendu Roy Rohit, Tasnim Alam, Shadeeb Hossain, Adnan Maqsud, Najia Hossain, Mohammad Tarique, and Maruf Hossain, "Experimental Analysis on Wireless Energy Transfer Via Strongly Coupled Magnetic Resonance", Proceedings of International Conference on Engineering Research, Innovation and Education, (CERIE 2011), January 2011, Dhaka

Tanveer Bhuiyan, Mohammed Tarique, and Rumana Islam, "Routing in MANET: Long hops vs short hops", Proceedings of International Conference on Electrical and Computer Engineering, December 2008, Dhaka, Bangladesh, pp. 600-605

Mohammed Tarique, Kemal E. Tepe, and Mohammad Naserian, "A cross layer design for forwarding node selection in wireless Ad Hoc Networks", Proceedings of International Conference on Wireless Networks, Communication and Mobile Computing (IEEE Wirellesscom), 2005, Hawaii, USA, pp. 802-807

Mohammed Tarique, Kemal E. Tepe, and Mohammad Naserian, "Hierarchical Dynamic Source Routing : Passive Forwarding Node selection for Wireless Ad Hoc Network", Proceedings of International Conference on Wireless and Mobile Computing, Networking and Communication (WIMOB), 2005, pp. 73-78

Mohammed Tarique, Kemal E. Tepe, and Mohammad Naserian, "Energy Saving Dynamic Source Routing for Wireless Ad Hoc Network", Proceedings of the 3rd International Symposium, on Modeling and Optimization in Mobile Ad Hoc and Wireless Networks (WIOPT), 2005, Trenito, Italy, pp. 305-310

Mohammad Naserian, Kemal E. Tepe, and Mohammad Tarique, "Routing overhead analysis for Wireless Ad Hoc Network", Proceeding of IEEE International Conference of Wireless and Mobile Computing, Networking and Communication (WIMOB), 2005, Montreal, Quebec, pp. 87-92

Mohammad Naserian, Kemal E. Tepe, and Mohammad Tarique, "On the connectivity of nodes in wireless ad hoc and sensor network", Proceeding of IEEE Canadian Conference on Electrical and Computer Engineering, Saskatoon, Canada, pp. 2073-2075

Mohammad Naserian, Kemal E. Tepe, and Mohammad Tarique, "HDSR: Hierarchical Dynamic Source Routing for Heterogeneous Wireless Mobile Ad Hoc Networks", Proceeding of the 10th IFIP International Conference on Personal Wireless Communication (PWC), Colmar, France, 2005, pp. 125-132

Kemal E. Tepe, Mohammad Naserian, and Mohammad Tarique, "A New Hierarchical Architecture for Wireless Ad Hoc Network", In the Proceeding of Wireless 2004, Calgary, Alberta, pp. 246-254

PROFESSIONAL AND ACADEMIC ACTIVITIES

1. Professional Training

CISCO Routers and Switches, St. Clare College, Windsor, Ontario, Canada
Object Oriented Software Design, Lamar University, Beaumont Texas
ISO 9001 Quality System, Beximco Infusions Limited, Bangladesh
Time Management Workshop, Beximco Infusions Limited, Bangladesh
Human Resource Management, Beximco Infusions Limited, Bangladesh

2. Workshops

Accreditations Workshop, Ajman University of Science and Technology ABET, UAE
Industrial Automation Workshop, Lamar University, Texas
Sexual Harassment Workshop, Lamar University, Texas

Time and Motion Study Workshop, Beximco Infusions Limited, Bangladesh
Engineering Management Workshop, Beximco Infusions Limited, Bangladesh
Project Management Workshops, Institute of Business Administration, Bangladesh

3. Master Theses Supervision

Demonstration and performance study of different PON system for the next-generation optical fiber communication system.

Performance improvement of the tracking system for satellite laser communication link.

An analytical approach towards Bluetooth networking and its security architecture.

A comparative analysis of network performances for different routing protocols under Nakagami-m fading channel model and its impact on multi-hop mobile ad hoc network(MANET).

Minimizing shadowing effects in Mobile Ad hoc Networks (MANET).

Performance evaluation of MIMO based WiMAX system.

MEMBERSHIP OF PERIODICALS AND SCIENTIFIC JOURNALS

IEEE Transaction on Communication (Reviewer)

Communication Systems (Reviewer)

Sensor Networks (Reviewer)

Ad Hoc Networks (Reviewer)

International Journal of Computer and Communication Network (Reviewer)

International Journal Distributed and Parallel Processing (Reviewer)

International Journal of Wireless and Mobile Networks (Associate Editor)

International Journal of Selected Area of Telecommunications (Editorial member)

AWARDS

Ontario Graduate Scholarship (OGS), Ministry of Advanced Education and Skill Development, Provincial Government, Ontario, Canada

Tuition Scholarship, University of Windsor, Windsor, Ontario, Canada

Graduate Scholarship, University of Windsor, Ontario, Canada

Research Scholarship, University of Windsor, Ontario, Canada

Tuition Scholarship, Lamar University, Beaumont, Texas,USA

Teaching Assistantship, Lamar University, Beaumont, Texas,USA

Undergraduate Scholarship, Bangladesh University of Science and Technology, Bangladesh

Rajshahi Board Scholarship, Bangladesh