



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 Information Technology  
Department: Electrical Engineering  
Date of Birth: 11/02/1968  
Moile Number: 0501216446  
E-mail: m.tarique@ustf.ac.ae

### EDUCATIONAL BACKGROUND

#### 1. Doctorate

University: University of Windsor  
Country: Canada  
Date of Obtaining degree: 2007  
Major: Communication  
Minor:  
Title: Cross Layer Design for Hierarchical Routing Protocols for Mobile Ad Hoc Networks

#### 2. Master

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

#### 3. Bachelor

University: Bangladesh University of Engineering and Technology  
Country: Bangladesh  
Date of Obtaining degree: 1992

### 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
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**

Not Applicable

**2. Book Chapters**

Not Applicable

**3. Journal Articles**

2021 Rumana Islam, Esam Abdel Raheem, and Mohammed Tarique, "A study of using cough sounds and deep neural networks for the early detection of Covid-19," accepted for publication in Biomedical Engineering Advances, Elsevier Science.

2021 Rumana Islam and Mohammed Tarique, "A Novel Convolutional Neural Networks based Pathological Voice Detection using Spectrogram and Chromagram," accepted for publication in the International Journal of Electrical and Computer Engineering

2021 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

2020 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

2020 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

2020 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. 1247-1254,

2018

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
- 2017 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
- 2017 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
- 2017 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
- 2016 Hyder Khaleq, Ali Abu El-Nour, and Mohammed Tarique, “*A Reliable Wireless Systems for Water Quality Monitoring and Level Control*”, Network Protocols and Algorithm, Vol.8. No. 3, October 30,2016, pp. 1-14
- 2016 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
- 2016 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
- 2016 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
- 2016 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
- 2015 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
- 2015 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
- 2015 Fatmah ElZahra, Ameena 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
- 2015 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
- 2014 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
- 2014 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

- 2014 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
- 2014 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
- 2013 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
- 2013 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
- 2012 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
- 2013 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
- 2012 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
- 2011 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
- 2009 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
- 2009 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
- 2017 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
- 2011 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
- 2012 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
- 2012 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
- 2011 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 (IJ DPS), Vol.2, No.4, July 2011, pp. 88-101
- 2010 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
- 2011 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
- 2011 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
- 2011 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
- 2011 Nepal Narayan and Mohammed Tarique, “*Performance Analysis of MIMO based WiMax System*”, International Journal of Selected Area of Telecommunication, July 2011, pp. 20-25
- 2010 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
- 2008 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
- 2008 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
- 2005 Md. Anwar Hossain, Poompat Saengudomlert, and Mohammed Tarique, “*Effects of Processing Gain on CDMA systems*”, The AIUB Journal of Science and Engineering, Vol. 7, N0.1 , August 2008

#### 4. Conferences

- 2021 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.
- 2019
- 2018 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
- 2014 [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
- 2012 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
- 2010 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
- 2011 Shamendu Roy Rohit, Tasnim Alam, Shadeeb Hossain, Adnan Maqsd, 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
- 2008 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
- 2005 [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 Wirelesscom), 2005, Hawaii,USA, pp. 802-807
- 2005 [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
- 2005 . 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
- 2005 . 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
- 2005 . 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
- 2005 . 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
- 2005 . 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.

#### 4. Doctorate Theses Supervision

Not Applicable

#### 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