

Curriculum Vitae (CV) for Dr. Mohammad Mahfuzul Islam, PEng

Detailed CV				
1	Personal details			
	Name	Dr. Mohammad Mahfuzul Islam, PEng		
	Father's Name	Mohammad Nurul Islam		
	Mother's Name	Moyna Begum		
	Spouse	Munzu Ara Begum		
Date of Birth	01 January 1973	Citizenship	Bangladesh	
2	Personal contact details			
	Mailing address	Professor, Department of Computer Science and Engineering (CSE), Bangladesh University of Engineering and Technology (BUET), Shahbag, Dhaka-1000		
	Permanent address	Village: Munshinangla, P.O. Boiradanga, Upazilla: Melandah, District: Jamalpur, Postcode-2010		
	Present address	7/D, Bakshi Bazar Residential Area, BUET Teachers Quarter, Shahbag, Dhaka-1211		
	Telephone No.	Phone: (+880 2) 55167100, 55167228-57, Ext. 7987(Home), 6118 (Office); Mobile: +880 191 307 1907, +8801756622043		
E-Mail address	mahfuz@cse.buet.ac.bd ; mahfuz.islam@gmail.com			

3	Education	Degree Obtained	Institute	Division/CGPA	Year
		PhD in Information Technology ¹	Gippsland School of Information Technology, Monash University, Australia	No Class Offered.	2002- 2006
Masters (M.Sc. Engg degree) in Computer Science and Engineering ²	Department of CSE, BUET, Dhaka, Bangladesh	CGPA 3.67 (scale: 4.00)	1998-2000		
Bachelor (B.Sc. Engg degree) in Computer Science and Engineering ³	Department of CSE, BUET, Dhaka, Bangladesh	CGPA 3.87 with honours ⁴ (scale: 4.00)	1990-1994		
HSC	Notre Dame College, Dhaka	First division with star marks (86.9%)	1988-1990		
SSC	Melandah Umir Uddin Pilot High School, Jamalpur	First division with start marks (76.8%)	1986-1988		

¹PhD Thesis title: Mobility Support Resource Management Schemes for Cellular Multimedia Networks.

²M. Sc. Engg. Thesis title: Automatic Vessels Hull Form Generation using Neural Nets and Genetic Algorithms.

³B. Sc. Engg. Thesis title: Interconnection Networks for Parallel Computers.

⁴Criteria for obtaining Honors: undergraduate level CGPA \geq 3.75.

4	Job Experiences	Position	Organization	From Date	To Date
		Vice-Chancellor	Bangabandhu Sheikh Mujibur Rahman Digital University, Bangladesh	20 Nov 2022	14 Sept 2024
Vice-Chancellor	Canadian University of Bangladesh	01 Jan 2018	31 Dec 2021		
Professor	Dept of CSE, BUET	03 July 2011	Till date		
Associate Professor	Dept of CSE, BUET	09 Aug 2009	02 July 2011		
Assistant Professor	Dept of CSE, BUET,	03 Dec 2000	08 Aug 2009		
Lecturer	Dept of CSE, BUET	17 Sept 1997	02 Dec 2000		

		Casual Lecturer/Teaching Assistantship	Gippsland School of Information Technology, Monash University, Australia	18 Mar 2002	18 Nov 2006
		Part-time Research Assistant	School of Multimedia and Information Technology, Southern Cross University, Australia	04 Oct 2005	31 Dec 2005

5	Administrative /Management Experiences	Position	Organization	From Date	To Date
		Provost Head	Shahid Smriti Hall, BUET Dept of CSE, BUET	2016 1 Mar 2014	2017 1 Mar 2016
		Director	Dhaka Electric Supply Company Limited (DESCO)	2011	2013
		Associate DSW	BUET	2009	2012
		Assistant Provost	Nazrul Islam Hall, BUET	2007	2009

6	Leadership /Management Experiences (Elected Post)	Position	Organization	From Date	To Date
		President (2 terms)	Bangladesh Computer Society (BCS)	2012	2018
		Chairman (3 terms)	Computer Engineering Division, Institute of Engineers Bangladesh	2013	2020
		Chairman	Question Making Committee, BD-ITEC, ICT Division, Bangladesh and IPA, Japan	2014	Till date
		International Students' Officer	Monash Postgraduate Association (MPA), Monash University, Australia	2004	2005
		Gippsland Campus Representative	Monash Postgraduate Association (MPA), Monash University, Australia	2003	2004
		Vice-President	Jamalpur District Students' Association. Dhaka	1995	1996
Secretary General	BUET Students Association, Jamalpur	1993	1995		

7	Professional Membership	<ol style="list-style-type: none"> 1. Fellow, Bangladesh Computer Society (BCS), No. F/00180. 2. Fellow, Institute of Engineers Bangladesh (IEB), No. F/9339. 3. Member, Institute of Electrical and Electronics Engineers (IEEE), Member#41576470. 4. Member, Association of Computing Machinaries (ACM).
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8	Professional Awards/ Honours Received	<ul style="list-style-type: none"> • Research assistantship: 04 October 2005 to 31 December 2005 at School of Multimedia and Information Technology, Southern Cross University, Australia. • Student travel award: IEEE Communications Society (ComSoc) Student Travel Grant 2004 from region 10 for IEEE ICC 2004. • Research scholarships: <ol style="list-style-type: none"> 1. Monash International Postgraduate Research Scholarship (MIPRS), Monash University, Australia;
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		<ol style="list-style-type: none"> 2. Monash Graduate Scholarship (MGS), Monash University, Australia; and 3. Commonwealth Scholarship for postgraduate studies in Canada (not taken). <ul style="list-style-type: none"> • Research website and poster competition: <ol style="list-style-type: none"> 1. First prize in Research Poster Design Competition 2003, Gippsland School of Computing and Information Technology, Monash University, Australia. 2. First prize in Research Website Design Competition 2003, Gippsland School of Computing and Information Technology, Monash University, Australia. • BUET Dean's scholarships: received in every academic year (given to the undergraduate students of the university having CGPA \geq 3.75 in the respective academic year.) • BUET merit scholarship: <ol style="list-style-type: none"> 1. Academic merit scholarships in most of the academic years (given to the topmost 10% undergraduate students of the university). 2. Merit scholarship based on undergraduate admission test in BUET (given to the topmost 50 students. Note that during my admission in 1990 selected 3500 students having very good results were appeared in the admission test and 500 students were selected for admission. I secured 12th position in this test.). • Technical scholarship: received during all the four years study period at BUET. • HSC merit scholarship: 1990, Dhaka Education Board (not availed due to shifting from Dhaka Medical College to BUET). • Notre Dame College scholarship: Full tuition fee exemption scholarship at Notre Dame College (given to topmost 3 students among 850 in science division.). • SSC merit scholarship: 1988, Dhaka Education Board. • Jamalpur district council scholarship: 1988, given to the topmost 3 students in Jamalpur district based on SSC results. • Perfect attendance certificate from Notre Dame College. • Class VIII talent-pool scholarship • Primary school scholarship.
9	Professional Work at National and International levels	<p><u>Organizing National and International Seminars, Workshops and Conferences</u></p> <ol style="list-style-type: none"> (a) Steering Committee, The 11th International Conference on Networking, Systems and Security (NSysS) 2024. (b) Patron, First International Conference on Bangabandhu and Bangladesh 2021 (Selected papers published in Communication in Computer and Information Science by Springer). (c) Technical Chair, International Conference on Networking Systems and Security (NSysS), 2017. (d) General Chair, International Conference on Networking Systems and Security (NSysS), 2015 and 2016. (e) Numerous seminars at Bangladesh Computer Society (BCS) and Institute of Engineers Bangladesh (IEB) (f) Member of the steering committee, ACM International Computer Programming Contest, Dhaka site held in BUET, 2001.

- (g) Member of the organizing committee of the International Conference on Computer and Information Technology, 1998 (ICCIT'1998).

Keynote Speaker and Presenting Research Articles (Partially mentioned)

- 1) Keynote on 5th Industrial Revolution and 5G: Bangladesh Perspective (Digital Bangladesh Festival 2022 and Ministry of Posts, Telecommunication and ICT, Bangladesh 2022).
- 2) Keynote on Education, Research and Innovation in Building Smart Bangladesh, Institution of Engineers Bangladesh (IEB 2024).
- 3) Keynote on Fourth Industrial Revolution: Preparedness in Society and Industry (IEB 2023).
- 4) Keynote on Role of BDU in Building Smart Bangladesh (Bangladesh Accreditation Council, 2024 and Bangabandhu Sheikh Mujibur Rahman Digital University, Bangladesh 2023).
- 5) Keynote on Smart Bangladesh – Implementation of 5IR (Ministry of Public administration 2023 and Public Administration Training Centre 2023).
- 6) Keynote on Smart Bangladesh – Challenges and Opportunities (IEB 2023).
- 7) Keynote on Fourth Industrial Revolution and Transportation: Perspective Bangladesh (Ministry of Road Transport and Bridges, 2022).
- 8) Keynote on Fourth Industrial Revolution for Life Insurance: Bangladesh Perspective (Jibon Bima Corporation, 2022).
- 9) Keynote on Fourth Industrial Revolution: Bangladesh Perspective (Internal Resource Division, Ministry of Finance, 2022).
- 10) Keynote on Fourth Industrial Revolution: Bangladesh Perspective (IEB 2021, National Technical Education Board 2021).
- 11) Keynote on Covid 19 and Digital Bangladesh (IEB 2021).
- 12) Keynote on Digital Bangladesh: Government to Take Next Steps (BUET 2018).
- 13) Keynote on Digital Bangladesh Beyond 2021 (Digital Bangladesh Fair 2020 and Chittagong University of Science and Technology 2020).
- 14) Keynote on A Roadmap to Resilience Readiness for Emerging Cyber Threats (IEB 2023).
- 15) Keynote on Digital Security: Challenges and Opportunities (Digital Security Agency 2019).
- 16) Keynote on Education 4.0 (Canadian University of Bangladesh 2019).
- 17) Keynote on Outcome Based Education (Stamford University, Bangladesh 2018).
- 18) Keynote on Publish or Perish (Stamford University, Bangladesh 2018).
- 19) Keynote on Research Methodology (Stamford University, Bangladesh 2018).
- 20) Keynote on Role of FinTech in Financial Inclusion for Property Eradication: Perspective Bangladesh (IEB, 2021).

- 21) Keynote on Role of FinTech / Agent Banking in Financial Inclusion for an Equity Lens in Line with Public-Private Partnership (Bangladesh Internet Governance Forum, 2021).
- 22) Keynote on How to Prepare Good Questions (Chittagong University of Science and Technology 2021 and BD-ITEC 2023).
- 23) Keynote on ICT Freelancing in Bangladesh: Present Status, Challenges and Opportunities (National Skill Development Authority 2022).
- 24) Keynote on Innovation and Commercialization in the 4th Industrial Revolution: Perspective Bangladesh (Rashid Memorial Lecture, IEB 2023).
- 25) Keynote on Innovative Engineering Solutions Towards Sustainability in South and Central Asia (FEISCA Seminar, Sri Lanka 2019)
- 26) Keynote on IoT, BigData Analytics and AI for eGovernance: Perspective Bangladesh (Public Administration Training Centre 2021).
- 27) Keynote on Nanotechnology and Innovations for 4IR in Asia Pacific and Beyond (Bangladesh Stem Society, 2021).
- 28) Keynote on Smart City (Bangladesh Computer Society, 2016).
- 29) Keynote on Social Media Addiction and Cyber Bullying (IEB 2023).
- 30) Keynote on Trends of Using Social Media in Politics (IEB 2019).
- 31) Keynote on Digital Bangladesh, Institute of Engineers Bangladesh, Comilla Centre, 2016.
- 32) Keynote on Taking Steps to Boost Bangladesh Software Industries, Digital World 2012, Organized Ministry of ICT, Peoples Republic of Bangladesh.
- 33) Keynote on Digital Bangladesh and Government to take next steps, Institute of Engineers Bangladesh, Headquarter, Dhaka, 2013.
- 34) On 10 Dec 2004, at *Australian Telecommunications, Networks and Applications Conference* (ATNAC 2004) held at Sydney, Australia, "A novel satisfaction-driven resource allocation strategy in cellular multimedia networks."
- 35) On 24 Nov 2004 at *IEEE Tencon* Conference held at Chiang Mai, Thailand, "A Novel Traffic Trends and Directionality Based Cell Visiting Probability Estimation for Resource Reservation in Multimedia Cellular Networks."
- 36) On 22 Nov 2004 at *IEEE Tencon* Conference held at Chiang Mai, Thailand, "An Efficient Transmission Scheme for Video-on-Demand Systems."
- 37) On 22 June 2004 at *IEEE International Conference on Communications* (ICC'2004) held at Paris, France, "A novel mobility support resource reservation and call admission control scheme for quality-of-service provision in wireless multimedia communications."
- 38) On 17 June 2004 at *Stamford University, Bangladesh*, Bangladesh, "Parametric mobility support resource reservation and call admission control scheme for wireless networks."

		<p>39) On 16 June 2004 at <i>Bangladesh Computer Society (BCS)</i>, Bangladesh, “Mobility support resource reservation in mobile multimedia communications.” (Presented as a key note speaker).</p> <p>40) On 18 May 2004 at <i>Gippsland School of Computing and Information Technology, Monash University</i>, Australia, “A novel mobility support resource reservation and call admission control scheme for quality-of-service provision in wireless multimedia communications”</p> <p>41) On 09 December 2003 at <i>Australian Telecommunications, Networking and Applications Conference (ATNAC’2003)</i> held at Melbourne, Australia, “Directional probability function estimation for QoS provisioning in mobile networks using Laplace pdf.”</p> <p>42) On 01 October 2003 at <i>AVIPAC/MRG research group, Monash University</i>, Australia, “Mobility support resource management for mobile multimedia communications.”</p> <p>43) On 02 April 2003 at <i>Gippsland School of Computing and Information Technology, Monash University</i>, Australia, “Adaptive mobility and survivability support QoS provisioning for mobile multimedia communications”</p>
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10	Major Courses Taught at Universities including BUET and Monash University	<p><u>Undergraduate Level</u></p> <ul style="list-style-type: none"> • Software Engineering • Information System Management • Object Oriented Programming Language • Structured Programming Language • Wireless Networks • Information System Design • Computer Graphics • Computer Networks • Digital logic Design • IT in Organizations (at Monash University, Australia) • Artificial Intelligence <p><u>Postgraduate Level</u></p> <ul style="list-style-type: none"> • Software and Application Security • Network Security • Information System Management • Business Forecasting (at Monash University, Australia) • Financial Modeling (at Monash University, Australia) • Distributed Database management • Query Optimization and Control • Software Project Management
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11	Research Supervision	<u>PhD Level (As a sole Supervisor in CSE, BUET):</u>																		
		<table border="1"> <thead> <tr> <th>Student# and Name</th> <th>Thesis Title</th> <th>Pass Year</th> </tr> </thead> <tbody> <tr> <td>Dr. A. H. M. Kamal</td> <td>Predictive Reversible Data Hiding Scheme for Enhanced Embedding Capacity</td> <td>2017</td> </tr> </tbody> </table>	Student# and Name	Thesis Title	Pass Year	Dr. A. H. M. Kamal	Predictive Reversible Data Hiding Scheme for Enhanced Embedding Capacity	2017												
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		<u>Masters Level (As a sole Supervisor):</u>																		
		Number of Masters students completed Thesis under my Supervision in CSE, BUET: 6																		
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<u>Undergraduate Level</u>																				
Number of undergraduate students completed Thesis under my Supervision in BUET: 100+																				

12	Consultancy on ICT Project Development and Evaluation	<p>All of the Consultancy activities are carried out under the Rules and Regulations of Bureau of Research, Testing and Consultation (BRTC), BUET (Partial list)-</p> <ul style="list-style-type: none"> • Project leader, Online language learning software development project developed for ICT division, Ministry of Posts, Telecommunications and IT. • Project Leader of Consulting Services for Acceptance of ICT Goods and Services including Biometrics System from Vendor for Preparation of Electoral Roll with Photographs and Facilitating the Issuances of National ID Card Project, Election Commission Secretariat of Bangladesh (from October 2010 to June 2011). • Member, Evaluation team for IDB-BISEW scholarship project of Islamic Development Bank (January 2011 to June 2011). • Project Leader of the Team Preparing Tender Documents (including designing of passport and device specifications along with different levels of Security) for the project of "Introduction of Machine-Readable Passport (MRP) and Machine-Readable VISA (MRV) in Bangladesh" (from October 2009 to March 2010). • Project Leader for Development of Automatic Generalized Back Office Management System for Member Houses of Dhaka Stock Exchange Ltd (from October 2007 to date). • Project Leader of Tender Evaluation team for acquiring of LAN and WAN devices for South East Bank Ltd. (October 2008 to February 2009).
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		<ul style="list-style-type: none"> • Group leader of the team of consultants for testing equipments and studying environmental requirements for the project of networking Bangladesh Secretariat under the ICT Task Force, Ministry of Planning, Bangladesh (August 2007 to December 2007). • Consultant for the Evaluation of Remittance Management Software developed by Agrani Bank (August 2008 to December 2008). • Member of the Cabinet Division Decision Retrieval System development team in 1997-1998. • Member of the Tender Evaluation team for networking the BASIC Bank Ltd, Bangladesh (August 2001 to October 2001). • Team Leader/Member of CSE, BUET team for distribution of share market lotteries (many times). • Member, Evaluation team for IDB-BISEW scholarship project in January 2009.
13	Serving in different National and International Committees	<p>Served in around a hundred of National level committees either as a member (in most cases) or convener. A partial list is given below:</p> <ul style="list-style-type: none"> • Continuous Member in Tender and Proposal Evaluation Committees, from 2007 to till date, PERP and IDEA Projects, Bangladesh Election Commission. • Continuous Member in Tender and Proposal Evaluation Committees, from 2008 to till date, Higher Education Quality Enhancement Project, University Grants Commission, Bangladesh. • Member, in a number of Specification Design and Tender Evaluation Committees, Ministry of Education, Peoples Republic of Bangladesh. • Member, ICT Scholarship and Innovation Review Committee, Information and Communication Technology Division, Ministry of Posts, Telecommunications and Information Technology, Government of Peoples Republic of Bangladesh. • Member, Recruitment Board, Public Service Commission (Several Times). • Chairman, Recruitment Board, Agrani Bank Limited, 2009. • Member, Expert Committee for Optic Fiber Purchasing and Connectivity for Setting Up Camera Monitoring System for Dhaka City, Bangladesh Police Headquarter, Government of Peoples Republic of Bangladesh in June 2011. • Member, Tender Evaluation Committee, Manpower, Employment and Training Bureau, Government of Peoples Republic of Bangladesh in May 2011. • Member, Evaluation Committee for Expression of Interest, Selection of Project Management Consulting (PMC) Firm, Strategic Communication Approach (SCA) Firm and Information Technology Consulting (ITC) Firm, Preparation of Electoral Roll with Photographs and Facilitating the Issuances of National ID card Project, Election Commission Secretariat of Bangladesh in April 2011.

- Member, Steering Committee, Establishment of South Asia Sub-regional Economic Cooperation (SASEC) Information Highway (Bangladesh), Ministry of Sciences and ICT, Government of Peoples Republic of Bangladesh in April 2011.
- Member, Frame-Work Committee for Probashi Kallyan Bank, Ministry of Expatriates' Welfare and Overseas Employment, Government of Peoples Republic of Bangladesh (from April 2011 to 2013).
- Member, Committee for Incorporating Information Technology in Probashi Kallyan Bank, Ministry of Expatriates' Welfare and Overseas Employment, Government of Peoples Republic of Bangladesh (from April 2011 to 2013).
- Member, Expert Committee for Preparing Questionnaire, Department of Statistics, Ministry of Planning, Government of Peoples Republic of Bangladesh in February 2011.
- Member, Tender Evaluation Committee for Supply, Installation and Commissioning of High Security License Card, Enrolment System, Register System, Personalization System with Related Logistics, Services and Training on Turn-Key Basis, Bangladesh Road Transport Authority, Government of Peoples Republic of Bangladesh in March 2011.
- Member, Committee for Preparing Technical Specifications of Diving License, Bangladesh Road Transport Authority, Government of Peoples Republic of Bangladesh in December 2010.
- Member, Committee for Investigating the Unauthorized Cyber Attacks to the Websites of Different Districts of Bangladesh, Access to Information (A2I) Programme, Prime Minister's Office, Government of Peoples Republic of Bangladesh in March 2010.
- Member, Committee for Analyzing the Data Processing Software for incorporation of MPO, Ministry of Education, Government of Peoples Republic of Bangladesh (from March 2010 to April 2010).
- External Member, Exam Committee, Dhaka University, Bangladesh, (from 2010 to date).
- Member, Tender Evaluation Committee, Preparation of Electoral Roll with Photographs and Facilitating the Issuances of National ID Card Project, Election Commission Secretariat of Bangladesh (from 2009 to date).
- Member, Committee for Preparing Specifications of Database Cleansing, AFIS Matching and other software and Hardware, Preparation of Electoral Roll with Photographs and Facilitating the Issuances of National ID Card Project, Election Commission Secretariat of Bangladesh in December 2009.
- Member, Syllabus Preparation Committee for the Department of Computer Science and Engineering, Jatiyo Kobi Kazi Nazrul Islam University (from 2008 to 2012).

		<ul style="list-style-type: none"> • Member, Tender Evaluation Committee for Bangladesh Computer Council, Ministry of Sciences and ICT, Government of Peoples Republic of Bangladesh in July 2009. • Member, Project Implementation Committee for Support for Development of Public Sector use of ICT under EMTAP, Bangladesh Computer Council, Ministry of Sciences and ICT, Government of Peoples Republic of Bangladesh in January 2009 (Nominated by Honorable Vice Chancellor, BUET). • Member, Review Committee for the Progress of MIS development for the PPSU- Ministry of Fish and Livestock, Government of Peoples Republic of Bangladesh in January 2009 (Nominated by Honorable Vice Chancellor, BUET). • External Member, Syllabus Preparation Committee for the Department of Computer Science and Engineering, East West University, Bangladesh in January 2009 (Nominated by Honorable Vice Chancellor, BUET). • Technical Expert for Medical Equipment Acceptance Committee, Bangabandhu Sheikh Mujibur Rahman Medical University, Bangladesh in May 2008 (Nominated by Honorable Vice Chancellor, BUET). • Member, Tender Evaluation Committee for Investment Promotion and Financing Facility (IPFF) Project, Bangladesh Bank in January 2008 (Nominated by Honorable Vice Chancellor). • Member, Automatic Letter Sorting Machine Acceptance Committee of Bangladesh Postal Division in November 2006 (Nominated by Honorable Vice Chancellor, BUET).
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14	University level Curriculum Development and Review	<p><u>Undergraduate level Curriculum Development at different Universities (Partial list)</u></p> <ol style="list-style-type: none"> 1. For 5 (five) programs in Bangabandhu Sheikh Mujibur Rahman Digital University, Bangladesh – Educational Technology and Engineering (EdTE), Cyber Security Engineering (CySE), Data Science and Engineering (DSE), Software Engineering (SE) as well as IoT and Robotics Engineering (IRE) (Complete curriculum). 2. Program of Shipping and Maritime Science (SMS) in Canadian University of Bangladesh (Complete curriculum). 3. Program of Computer Science and Engineering for the Department of Computer Science and Engineering (CSE) at Bangladesh University of Engineering and Technology (BUET) (as a member and the Head). 4. Program of Computer Science and Engineering (CSE) at Chittagong University of Engineering and Technology (CUET) (as a member). 5. Program of Computer Science and Information Technology (CSIT) for the Department of Computer Science and Engineering at Stamford University Bangladesh (Complete curriculum).
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6. Program of Computer Science and Engineering (CSE) for the Department of Computer Science and Engineering at Stamford University Bangladesh (Complete curriculum).
7. Program of Computer Science and Engineering (CSE) at University of Science and Technology Chittagong (as a member).
8. Program of Computer Science and Engineering (CSE) at Bangladesh University of Business and Technology (BUBT) (As the supervisor).
9. Program of Computer Science and Engineering (CSE) at Asian University Bangladesh (Complete Curriculum).

Masters level Curriculum Development at different Universities (Partial list)

1. For 5 (five) programs in Bangabandhu Sheikh Mujibur Rahman Digital University, Bangladesh – Educational Technology and Engineering (EdTE), Cyber Security Engineering (CySE), Data Science and Engineering (DSE), Software Engineering (SE) as well as IoT and Robotics Engineering (IRE) (Complete curriculum).
2. Master of Science in Computer Science and Engineering for the Department of Computer Science and Engineering at Bangladesh University of Engineering and Technology (Courses: Wireless Resource Management, Information System Management and Network Security)
3. Master of Science in Computer Science and Engineering for the Department of Computer Science and Engineering at Stamford University Bangladesh (Complete Curriculum).
4. Masters in Computer Application for the Department of Computer Science and Engineering at Stamford University Bangladesh (Complete Curriculum).

Reviewing Masters and Undergraduate Curriculum for University Grants Commission

1. Bachelor of Science in Electronics Communications and Information Technology.
2. Master of Science in Cyber Security.

Working as an expert for affiliation of universities

1. Department of Computer Science and Engineering (CSE), International University of Scholars (IUS), Bangladesh, 2016.
2. Department of Electrical and Electronics Engineering (EEE), International University of Scholars (IUS), Bangladesh, 2016.

Adviser of Vice-Chancellor for CSE Dept

1. Stamford University Bangladesh (from 2007 to 2002 and from 2006 to 2018)

15	Publications	<p><u>Book</u></p> <p>[1] M. M. Islam, Mobility Support Wireless Resource Management for Cellular Multimedia Networks, VDM Verlag Dr. Muller Publishers, ISBN: 978-3-639-21965-4, 2009.</p>
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Book Chapter

- [1] M. M. Islam, *Mobility Support Wireless Resource Management for Cellular Multimedia Communications*, VDM Publishers, ISBN: 978-3-639-21965-4.
- [2] M. M. Islam and M. Murshed, "Mobility support resource management in mobile networks," *Handbook of Research in Mobile Business: Technical, Methodological and Social Perspectives*, pp. 332-364, Chapter XXIV, Idea Group Publishers (IGP), Hershey, PA, USA.

List of Peer-Reviewed International Journal Articles:

1. Mohammad Mamun Elahi, Md. Mahbubur Rahman, Mohammad Mahfuzul Islam, **An efficient authentication scheme for secured service provisioning in edge-enabled vehicular cloud networks towards sustainable smart cities**, *Sustainable Cities and Society*, 76, 2022. [\[paper link\]](#)
2. Onika Akter, Mohammad Ali Moni, Mohammad Mahfuzul Islam, Julian M. W. Quinn and A. H. M. Kamal, **Lung cancer detection using enhanced segmentation accuracy**, *Applied Intelligence*, Springer Nature, 2020. [\[paper link\]](#)
3. A. H. M. Kamal, Mohammad Mahfuzul Islam and Zahedul Islam, **An embedding technique for smartcard-supported e-healthcare services**, *Iran Journal of Computer Science*, 3, 195-205, 2020. [\[paper link\]](#)
4. A. H. M. Kamal, Mohammad Mahfuzul Islam, **A New Histogram-Shifting-Imitated Embedding Scheme**, *Journal of Computer Engineering*, 1, 82-86, 2018.
5. Chinmay Bepery, Mohammad Mahfuzul Islam, Md. Mahbubur Rahman, Asma Akter Maria, Amina Nasrin Sumyea, **Index Based Gap Position Least Count Forward Backward Multiple Pattern Matching Algorithm**, *Journal of Computer Engineering*, 1, 41-48, 2018.
6. A. H. M. Kamal and Mohammad Mahfuzul Islam, **An image distortion-based enhanced embedding scheme**, *Iran Journal of Computer Science*, 1, 175–186, 2018. [\[paper link\]](#)
7. A. H. M. Kamal and Mohammad Mahfuzul Islam, **Enhancing embedding capacity and stego image quality by employing multi predictors**, *Journal of Information Security and Applications*, 32, 59-74, 2017. [\[paper link\]](#)
8. A. H. M. Kamal and Mohammad Mahfuzul Islam, **Boosting up the data hiding rate through multi cycle embedment process**, *Journal of Visual Communication and Image Representation*, 40, 574–588, 2016. [\[paper link\]](#)
9. A. H. M. Kamal and Mohammad Mahfuzul Islam, **Enhancing the performance of the data embedment process through encoding errors**, *Journal of Electronics*, 5, 79-95, 2016. [\[paper link\]](#)
10. Sultana Habiba, A. H. M. Kamal, Mohammad Mahfuzul Islam, **Enhancing the Robustness of Visual Degradation Based HAM Reversible Data Hiding**, *Journal of Computer Science*, 12, 88-97, 2016.
11. Mohammad Mahfuzul Islam, Akramul Azim, Golam Sorwar, **A New Dynamic Service Span Based Energy Comparison LEACH for Achieving Expected**

WSNs Lifetime, *International Journal of Information and Communication Technology*, 8, 165-183, 2016.

12. Mohammad Mahfuzul Islam, Fariha Tasmin Jaigirdar, Mohammad Manzurul Islam, **Maximizing Network Interruption in Wireless Sensor Network: An Intruder's Perspective**, *International Journal of Computer Networks & Communications (IJCNC)*, 7, 103-121, 2015.
13. A. H. M. Kamal, Mohammad Mahfuzul Islam, **Facilitating and securing offline e-medicine service through image steganography**, *Healthcare Technology Letters*, 1, 74-79, 2014.
14. Md. Akkas Ali, Mohammad Mahfuzul Islam, **A Biometric Based: 3-D Ear Recognition System Combining Local and Holistic Features**, *International Journal of Modern Education and Computer Science (IJMECS)*, 5, 36-41, 2013.
15. F. T. Jaigirdar, Mohammad Mahfuzul Islam, **Assurance of the Maximum Destruction in Battlefield using Cost-Effective Approximation Techniques**, *Journal of Networks*, 7, 1967-1977, 2012.
16. Abu Sayed Md. Latiful Hoque, Mohammad Mahfuzul Islam, Md. Iqbal Hossain, Md. Faysal Ahmed, **Problem-Based e-Learning and Evaluation System for Database Design and Programming in SQL**, *International Journal of e-Education, e-Business, e-Management and e-Learning*, 2, 537-541, 2012.
17. Akramul Azim, Mohammad Mahfuzul Islam, **A Relay Node Based Hybrid Low Energy Adaptive Clustering Hierarchy for Wireless Sensor Networks**, *International Journal of Energy Information and Communications*, 3, 41-54, 2012.
18. Anupam Das, Mohammad Mahfuzul Islam, **SecuredTrust: A dynamic trust computation model for secured communication in multiagent systems**, *IEEE Transaction on Dependable and Secured Computing (TDSC)*, 9, 261-274, 2012.
19. F. T. Jaigirdar, Mohammad Mahfuzul Islam, S. K. Huq, **Grid Approximation Based Inductive Charger Deployment Technique in Wireless Sensor Networks**, *International Journal of Advanced Computer Science and Applications (IJACSA)*, 2, 30-37, 2011.
20. Mohammad Mahfuzul Islam, M. Murshed, **Parametric mobility support dynamic resource reservation and call admission control scheme for cellular multimedia communications**, *Journal of Computer Communications*, 30, 233-248, 2007.
21. Mohammad Mahfuzul Islam, M. Murshed, **An adaptive Min-max scheme for resource allocation in cellular multimedia networks**, *Wiley European Transactions in Telecommunications*, 17, 547-559, 2006.
22. Mohammad Mahfuzul Islam, M. Murshed, **Velocity and call duration support for QoS provision in mobile wireless networks**, *IEEE Wireless Communications*, 11, 22-30, 2004.

23. Mohammad Mahfuzul Islam, M. R. M Khondoker, C. M. Rahman, **Application of artificial intelligence techniques in automatic hull form generation**, *Journal of Ocean Engineering*, 28, 1531-1544, 2001.

List of Peer Reviewed Conference Articles:

1. Md. Mahbubur Rahman, Md. Shohrab Hossain, Mohammad Mahfuzul Islam, **An Energy Efficient Gravitational Model for Tree Based Routing in Wireless Sensor Networks**, *IEEE 12th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)*, 997-1002, 2021. [[paper link](#)]
2. Fariha Tasmin Jaigirdar, Mohammad Mahfuzul Islam, **A new cost-effective approach for battlefield surveillance in wireless sensor networks**, *International Conference on Networking Systems and Security (NSysS)*, 2016.
3. A. H. M. Kamal and Mohammad Mahfuzul Islam, **Enhancing the embedding payload by handling the affair of association and mapping of block pixels through prediction errors histogram**, *International Conference on Networking Systems and Security (NSysS)*, 5-8, 2016.
4. A. H. M. Kamal and Mohammad Mahfuzul Islam, **Capacity Improvement of Reversible Data Hiding Scheme through Better Prediction and Double Cycle Embedding Process**, *IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS)*, 16-18, 2015.
5. Md. Morshedul Islam, Mohammad Mahfuzul Islam, Golam Sorwar, **Energy Aware Bottleneck Nodes Avoidance Data Gathering Tree for Wireless Sensor Networks**, *The 14th International Conference on Wireless Networks (ICWN)*, 2015.
6. Mohammad Mamun Elahi, Mohammad Mahfuzul Islam, **A Distributed Neighbor Discovery Based Approach for Cluster Head Selection in Wireless Sensor Networks**, *International Conference on Electrical Information and Communication Technology*, 17-20, 2014.
7. Snigdha Khanum, Mohammad Mahfuzul Islam, **An enhanced model of vertical handoff decision based on fuzzy control theory & user preference**, *International Conference on Electrical Information and Communication Technology (EICT 2013)*, 457-462, 2014.
8. Akramul Azim, Mohammad Mahfuzul Islam, **Deterministic cluster head selection for wireless sensor networks**, *25th IEEE Canadian Conference on Electrical and Computer Engineering (CCECE)*, 1-4, 2012.
9. Fariha Tasmin Jaigirdar, Mohammad Mahfuzul Islam, Sikder Rezwanul Huq, **An Efficient and Cost Effective Maximum Clique Analysis based Approximation in Military Application of Wireless Sensor Network**, *14th International Conference on Computer and Information Technology (ICCIT)*, 2011.
10. Anupam Das, Mohammad Mahfuzul Islam, **Dynamic Trust Model for Reliable Transactions in Multi-agent Systems**, *Proceedings of the 13th International Conference on Advanced Communication Technology (ICACT 2011)*, 2011.

11. M. A. R. Mustafa, Mohammad Mamun Elahi, Mohammad Mahfuzul Islam, **Comparative performance analysis of MPEG4, FLV and 3GP multimedia file formats using wireless network parameters**, *13th International Conference on Computer and Information Technology (ICCIT)*, 23-25, 2010.
12. Akramul Azim, Mohammad Mahfuzul Islam, **Estimating the initial battery power of nodes and the optimal number of clusters to achieve the expected life span of wireless sensor networks**, *IEEE Tencon*, 251-256, 2010.
13. Akramul Azim, Mohammad Mahfuzul Islam, **Dynamic service policy-based clustered wireless networks**, *IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob)*, 196-202, 2010.
14. Anupam Das, Mohammad Mahfuzul Islam, **A Novel Feedback Based Fast Adaptive Trust Model for P2P Networks**, *Proceedings of the 35th IEEE Local Computer Networks (LCN 2010)*, 568-575, 2010.
15. Akramul Azim, Mohammad Mahfuzul Islam, **Hybrid LEACH: A relay node based low energy adaptive clustering hierarchy for wireless sensor networks**, *9th IEEE Malaysia International Conference on Communications (MICC)*, 911-916, 2009.
16. Akramul Azim, Mohammad Mahfuzul Islam, **A dynamic round-time based fixed low energy adaptive clustering hierarchy for wireless sensor networks**, *9th IEEE Malaysia International Conference on Communications (MICC)*, 922-926, 2009.
17. Z. Karim, N. R. Karim, M. M. Ali, G. Sorwar, Md. Monirul Islam, Mohammad Mahfuzul Islam, **Pattern based object segmentation using split and merge**, *IEEE International Conference on Fuzzy Systems*, 2009.
18. A. A. Yusuf, M. M. Murshed, Mohammad Mahfuzul Islam, **SIR performance of multipath cellular network for quality assured multimedia delivery**, *65th IEEE Vehicular Technology Conference (VTC)*, 924-928, 2007.
19. Md. Monirul Islam, M. Murshed, Mohammad Mahfuzul Islam, **Estimation of cell overload probability for adaptive bandwidth allocation scheme in cellular multimedia communications**, *IASTED International Conference on Wireless Networks and Emerging Technology (WNET)*, 160-165, 2005.
20. Md. Monirul Islam, M. Murshed, Mohammad Mahfuzul Islam, **Min-Max fairness scheme for resource allocation in cellular multimedia networks**, *IEEE International Conference on Information Technology (ITCC)*, 265-270, 2005.
21. Mohammad Mahfuzul Islam, M. Murshed, L. S. Dooley, **A novel mobility support resource reservation and call admission control scheme for quality-of-service provision in wireless multimedia communications**, *The IEEE International Conference on Communications (ICC)*, 20-24, 2004.
22. Mohammad Mahfuzul Islam, M. Murshed, L. S. Dooley, **A novel velocity-dependant directional probability function based call admission control scheme in wireless multimedia communications**, *23rd IEEE International Performance Computing and Communications Conference (IPCCC)*, 77-84, 2004.

23. Mohammad Mahfuzul Islam, M. Murshed, **A novel satisfaction-driven resource allocation strategy in cellular multimedia networks**, *Australian Telecommunications, Networks and Applications Conference (ATNAC)*, 598-603, 2004.
24. Mohammad Mahfuzul Islam, M. Murshed, **A novel traffic trends and directionality-based cell visiting probability estimation for resource reservation in multimedia cellular networks**, *IEEE Tencon*, 648-651, 2004.
25. Md. Monirul Islam, M. Murshed, L. S. Dooley, Mohammad Mahfuzul Islam, **Enhanced cell visiting probability for QoS provisioning in mobile multimedia communications**, *IEEE International Conference on Information Technology: Coding and Computing (ITCC)*, 258-262, 2004.
26. Md. Monirul Islam, M. Murshed, L. S. Dooley, Mohammad Mahfuzul Islam, **Comparative analysis of directional probability functions for mobility based resource reservation in wireless multimedia communications**, *3rd IEEE/IEE International Conference on Networking (ICN)*, 891-897, 2004.
27. Mohammad Mahfuzul Islam, M. Murshed, L. S. Dooley, **New mobility based call admission control with on-demand borrowing scheme for QoS provisioning**, *IEEE International Conference on Information Technology: Computers and Communications (ITCC)*, 263-267, 2003.
28. Mohammad Mahfuzul Islam, M. Murshed, L. S. Dooley, **Directional probability function estimation for QoS provisioning in mobile networks using Laplace pdf**, *Australian Telecommunications, Networks and Applications Conference (ATNAC)*, 2003.
29. Mohammad Mahfuzul Islam, M. Murshed, L. S. Dooley, **Influence of velocity on resource reserving directional probability function estimation for mobile multimedia communications**, *IEEE International Symposium on Intelligent Signal Processing and Communications Systems (ISPACS)*, 64-69, 2003.
30. Muhammad Mahmudul Islam, Shafquat Rahman, A. N. M. Ehtesham Rafiq, Mohammad Mahfuzul Islam, **Online handwritten Bangla numerical recognition by grid method**, *International Conference on Electrical and Computer Engineering (ICECE)*, 269-272, 2002.
31. Mohammad Mahfuzul Islam, M. Murshed, L. S. Dooley, **A direction-based bandwidth reservation scheme for call admission control**, *International Conference on Computers and Information Technology (ICCIT)*, 345-349, 2002.
32. M. R. H. Khondoker, C. M. Rahman, Mohammad Mahfuzul Islam, **Effectiveness of neural networks and genetic algorithm in hull form design**, *ASME 2001 Design Engineering Technical Conference (DETC-01)*, 2001.
33. I. Ahmed, Mohammad Mahfuzul Islam, **Open loop quality control of product manufacturing using genetic algorithms**, *International Conference on Computers and Information Technology (ICCIT)*, 286-290, 2001.
34. M. Awrangjeb, Mohammad Mahfuzul Islam, **An efficient and effective method for data mining**, *International Conference on Computers and Information Technology (ICCIT)*, 72-76, 2001.

		<p>35. Mohammad Mahfuzul Islam, C. M. Rahman, M. R. H. Khondoker, Generation of vessels' faired hull form using neural networks and genetic algorithms, <i>International Conference on Computers and Information Technology (ICCIT)</i>, 130-134, 2001.</p>
		<p>36. Mohammad Mahfuzul Islam, C. M. Rahman, A hybrid learning technique for concept acquisition, <i>National Conference on Computers and Information Systems (NCCIS)</i>, 84-89, 1997.</p>
		<p>37. A. Z. E. Hossain, M. Z. Rahman, Mohammad Mahfuzul Islam, On the performance of a multichannel R-ALOHA protocol for voice and data integration in short-haul wireless communication environments, <i>IEEE International Conference on Personal Wireless Communications (ICPWC)</i>, 465-469, 1997.</p>

16	Participation in Skill Development Workshop and Training	<ul style="list-style-type: none"> • ITEE Question Making Training: A week training held in JICA Centre Japan. • CISCO networking instructors training: Completed three semesters (out of four) of CISCO Certified Networking Associate (CCNA) Instructor training. Also taken CCNA classes in BUET Regional Academy. • Teachers' appreciation workshop: held during 29-30 May 2007 and offered by Directorate of Continuing Education, BUET. • Victorian partnership for advanced computing training: held on 29 May 2003 at Royal Melbourne Institute of Technology (RMIT) and offered by Victorian Partnership for Advanced Computing, Melbourne, Australia. • Operator Training at IAC: Held on 8 August 2010 in the Department of Computer Science and Engineering, Bangladesh University of Engineering and Technology. This training helps to run IAC in the Department.
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17	Countries Visited	<ul style="list-style-type: none"> • For Study: Australia • For Research: France, Thailand • As a National/JICA Representative: USA, France, Japan, Malaysia, Thailand, Hong-Kong, Mongolia, Myanmar, South Korea, China • For Entertainment: Singapore
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