MD MANIRUL ISLAM

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EXECUTIVE SUMMARY

With over 20 years of experience in the IT domain, I have developed specialization in both the practical and theoretical aspects of cybersecurity, network architecture, and the evolving landscape of digital security challenges. As a dedicated educator and researcher, I am passionate about conducting impactful research to enhance academic excellence and innovation.

EDUCATION

2019-2020	**Master of Networking and Systems Administration** Charles Sturt University, Australia Result: *Distinction*
1998-2001	**Bachelor of Science in Computer Engineering** University of Baguio, Philippines Result: *Honorable Mention*

PROFESSIONAL CERTIFICATIONS

PROFESSIONAL MEMBERSHIPS

- **Member (MIET)**, The Institution of Engineering and Technology (IET), United Kingdom
  Membership Number: **70734140**
- **Professional Member,** Association for Computing Machinery (ACM), USA
  Membership Number: **7169789**
- **Member**, Academic Council, American International University-Bangladesh
- **Member,** Cisco Networking Academy Advisory Board
- **President**, Bangladesh Cisco Networking Academy Council
- **Member**, Cisco SAARC Academy Council and Global Academy Evolution Advisory Council
- **Member,** Cisco Networking Academy Product Review Board
- **Industry Liaison Chair**, International Conference on Computing Advancements
- **Member**, Organizing Committee, Global Conference on Technology and Information Management
- **Member,** Performance Monitoring Committee, IDEA Project, Information and Communication Technology Division, Government of the People's Republic of Bangladesh

EMPLOYMENT HISTORY

AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH

Director, IT (Network Operations)	04/2015 – Present
Director, Institute of Continuing Education	10/2011 – Present
Deputy Director, Continuing Education Center	06/2010 – 09/2011
Coordinator, Continuing Education Center	08/2008 – 05/2010
Member, Academic Council	01/2023 – Present
Associate Professor, Department of Computer Science	12/2016 – Present
Assistant Professor, Department of Computer Science	06/2007 – 11/2016
Lecturer, Department of Computer Science	09/2005 – 05/2007

CISCO NETWORKING ACADEMY

Global Advisory Board Member	11/2017 – Present
Quality Assurance Support Specialist for Bangladesh	05/2007 – 12/2018
Instructor	03/2006 – Present

BANGLADESH UNIVERSITY

Lecturer, Department of Computer Science and Engineering	02/2005 – 08/2005

INFINITY INSTITUTE OF TECHNOLOGY

Lecturer, Department of Computer Science and Engineering	06/2004 – 12/2005

UNITECH TECHNOLOGY

Lead Software Engineer	09/2003 – 05/2004

PUBLICATIONS

[1] Md Tahsin Tasnim Aurin, Saad Bin Sami, Md. Mehedi Hasan Ratul, Md. Abdullah Al Mahmud Naiem, **Md. Manirul Islam**, Umme Salsabil (2026), "**Barta Prohori: A Community-Driven Deep Learning Framework to Classify Localized Smishing**", *International Conference on Artificial Intelligence, Computer, Data Sciences and Applications (ACDSA 2026)*, Boracay, Philippines, February 2026.

[2] Nadim Nawshad, Samira Kabir Rima, Md. Sajjadul Islam Juel, Md. Fahim Kabir Chowdhury, **Md Manirul Islam**, Umme Salsabil (2026), "**A Low-Cost IoT and Machine Learning-Based Web Application for Smart Hydroponic Horticulture and Plant Disease Detection**", *5th International Conference on Electrical, Computer & Telecommunication Engineering (ICECTE 2026)*, Rajshahi, Bangladesh, January 2026.

[3] Fahim Haider, Sadman Sakib, Mirza Sadman Mehrab, Mahmud Iftekhar Asef, **Md. Manirul Islam**, Samiur Rahman Khan (2026), "**A Blockchain-Enabled Framework for Secure and Transparent Smartphone Ownership Tracking**", *2nd International Conference on Engineering and Technology for Sustainable Development (ETSD 2026)*, Jashore University of Science and Technology, Bangladesh, January 2026.

[4] Md Didarul Alam Alif, Imtiaz Ahmed, Fahad Bin Ahmed, **Md. Manirul Islam**, Samiur Rahman Khan, Umme Salsabil (2026), "**Integrating Fog Computing and Content Caching: A Hybrid Framework for Intelligent Vehicular Networks**", *2nd International Conference on Engineering and Technology for Sustainable Development (ETSD 2026)*, Jashore University of Science and Technology, Bangladesh, January 2026.

[5] Nahin Nasir, Mohammed Shahriar Hossain, Md. Saiful Islam, Md. Arifiul Islam and **Md Manirul Islam** (2024), "**Transforming Medical Waste Management through IoT and Machine Learning: A Path towards Sustainability**", *12th Computing Conference 2024*, London, United Kingdom, July 2024.

[6] S.M.Rashadul Islam**, Md Manirul Islam**, Umme Salsabil (2020), "**A New Horizon of Data Communication through Quantum Entanglement**", *Global Conference on Technology and Information Management*, University of British Columbia, Vancouver, Canada, February 2020.

[7] **Md Manirul Islam**, Md. Sadad Mahamud, Umme Salsabil, A.A.M. Mazharul Amin, Samiul Haque Suman (2020), "**An IoT Based Water-Logging Detection System: A Case Study of Dhaka**", *Global Conference on Technology and Information Management*, University of British Columbia, Vancouver, Canada, February 2020.

[8] Md. Sadad Mahamud, **Md. Manirul Islam**, Md. Saniat Rahman, Samiul Haque Suman (2018), "**Custody: An IoT Based Patient Surveillance Device**", *Future Technologies Conference (FTC)*, Vancouver, Canada, Springer Volume 1, November 2018.

[9] Rifat Tasnim Anannya, Md. Abdullah Al Faruk, **Md Manirul Islam** (2018), "**Master-Slave Clustering Technique for High Density Traffic in Urban VANET Scenario**", *International Journal of Computer Science and Information Security (IJCSIS)*, ISSN-1947-5500, Vol 16, No. 7, July 2018.

[10] Md. Azizul Islam, **Md Manirul Islam** (2015), "**A Novel Signature-Based Traffic Classification Engine to Reduce False Alarms in Intrusion Detection Systems**", *International Journal of Computer Networks & Communications (IJCNC)*, Vol 7 No. 1, 2015.

[11] Umme Salsabil, M. Tanseer Ali, **Md. Manirul Islam** (2014), "**A Practical Approach to Asses Fatal Attacks in Enterprise Network to Identify Effective Mitigation Techniques**", *International Journal of Computer Networks and Communications Security (IJCNCS)*, ISSN- 2308-9830, Vol. 2, 2014.

[12] Md. Sadiq Iqbal, **Md. Manirul Islam**, "**Assessing the Tangible and Intangible Impacts of the Convergence of E-Learning and Knowledge Management**", *International Journal of Information Sciences and Techniques (IJIST)*, ISSN- 2249-1139, Vol. 3 No. 4, PP 33-41, July 2013.

[13] Avishekh Ahmed, Tanvir Ahmed, Md. Samawat Ullah, **Md. Manirul Islam**, "**Controlling and securing a Digital Home using Multiple Sensor Based Perception System Integrated with Mobile and Voice technology**", *International Journal of Information and Communication Technology Research (IJICT)*, ISSN- 2223-4985, Vol. 1 No. 5, PP 189-196, September 2011.

[14] Tanvir Ahmed, Md. Sujan Miah, **Md. Manirul Islam**, Md. Rakib Uddin (2011), "**Automatic Electric Meter Reading System: A Cost-Feasible Alternative Approach in Meter Reading for Bangladesh Perspective Using Low-Cost Digital Wattmeter and WiMax Technology**", *International Journal of Engineering and Technology (IJET)*, ISSN-1812-7711, Vol. 8 No. 3, September 2011.

[15] **Md. Manirul Islam**, Manzur H. Khan, Hamidul Islam, Carlin N. Z. Lamagna (August 2007), "**Knowledge-Based Economy: Trends and Implications for Bangladesh**", *AIUB Journal of Business and Economics (AJBE)*, ISSN: 1683-8742, Volume 6, Issue 2.

[16] Ahmed S.S., Haq S.M, **Md. Manirul Islam**, Raich P.A., Polash S.A., MMR Mozumdar (December 2006), **"Development of an Autonomous Vehicle Using Multiple Sensor Based Perception System"**, *The 3rd International Conference on Autonomous Robots and Agents (ICARA 2006)*, Massey University, New Zealand.

[17] Haq S.M, Md. Mostafizur Rahman Mozumdar, **Md. Manirul Islam**, Md. Shihabul Haque, Bayzid Ghani (October 2006), **"A Telematics Application for Stolen Vehicle Recovery Using On-Device Position Fixing"**, *The 1st International Conference on Communication and Electronics Engineering*

(ICCE 2006) Sponsored by IEEE, Hanoi University of Technology (HUT), Hanoi, Vietnam.

[18] **Md. Manirul Islam** (2006), "**Automatic Electric Billing System Using Digital Wattmeter and Powerline Carrier System**", *The CSE Review* (Shahjalal University of Science and Technology, Sylhet, Bangladesh), Volume 2.

PROJECT AND THESIS SUPERVISION

- Designing a coherent Distributed Data Mining Application for Electronic Goods Global Market Basket Analysis in Grid Computing Environments
- Controlling and Securing a Digital Home using Multiple Sensor Based Perception System Integrated with Mobile and Voice Technology
- An Intelligent Irrigation Scheduling System
- Hardware Scheduling for High Performance Computing Environment
- Online Home Surveillance System Using Real Time Video Streaming in Java Media Framework (JMF)
- A Cost-feasible Prepaid Car Parking System using RFID
- Using RFID: An Alternative Approach in Library Automation
- Access Control and Payroll Automation of Garment Industries in Bangladesh: An Alternative Solution using Fingerprint Authentication Module
- Bangladesh Law Portal, The First Law Portal in Bangladesh to provide legal resources for Bangladeshi People, (www.bdlawportal.org)
- Medical Knowledge Portal, The First Medical Knowledge Portal in Bangladesh, (www.bmkp.org)
- Simple Markup Language (SML): An Alternative of XML
- Magic String Purification from Script Vulnerability
- Autonomous Robot Navigation using Optical Mouse-based Odometry, Line Following and End of Line Detection
- Development of a Vision Controlled Mobile Robot Arm with 3D Freedom of Movement
- Analyzing DoS and DDoS Attacks to identify Effective Mitigation Techniques
- Evaluating Network Exploitation Techniques for Securing Enterprise LAN
- Optimization of Hybrid Pattern Matching to Reduce False Positives in Intrusion Detection Systems
- A Low-cost IoT Device for Gas Usage Monitoring and Leakage Detection
- IoT and Machine Learning for Sustainable Horticulture Guidance and Disease Detection
- Transforming Medical Waste Management through IoT and Machine Learning
- Android Malware Detection using Machine Learning
- A Community Machine Learning Approach to Combat Localized Phishing and Identity Theft

HONORS AND AWARDS

- **IT Masters – Master of Networking and Systems Administration Award** (2020) for achieving the highest GPA in the Master of Networking and Systems Administration course undertaken through the School of Computing and Mathematics, Charles Sturt University, Australia.
- **Plaque of Academic Excellence** (2001), Honorable Mention, BSCoE, Board of Directors and Management Council, University of Baguio, Baguio City, Philippines.
- **Be the Bridge** Award, Cisco Networking Academy (2021), Asia Pacific Region.
- **DevNet Associate Instructor Pioneer** (2021), Cisco Networking Academy.
- **Certificate of Recognition,** Member, Cisco Networking Academy Advisory Board, 2017-2021

- **15 Years of Service Award [2021]**, Cisco Networking Academy
- **Instructor Excellence Expert [2012]**, Cisco Networking Academy
- **Instructor Excellence Expert [2015],** Cisco Networking Academy
- **Instructor Excellence Expert [2016],** Cisco Networking Academy
- **Instructor Excellence Expert [2017],** Cisco Networking Academy
- **Instructor Excellence Expert [2018],** Cisco Networking Academy
- **Instructor Excellence Advanced [2021],** Cisco Networking Academy
- **Instructor Excellence Advanced [2022],** Cisco Networking Academy
- **CCNA Security Curriculum Instructor Specialist [2017],** Cisco Networking Academy
- **Cisco Instructor Trainer** for CCNA R&S, CCNP R&S, CCNA Security, CCNA Cybersecurity Operations, IT Essentials, IoT: Connecting Things, IoT: Big Data and Analytics, IoT Security.
- **Certificate of Distinction,** Finalist in the PIFO's (Philippine International Friendship Organization Foundation, Inc., Manila, Philippines) 31st Annual Search for the Three Most Outstanding International Students in the Philippines for year 2000.
- **Certificate of Recognition,** Most outstanding International Student for school year 2000-2001, University of Baguio, Baguio City, Philippines. 2000.
- **Certificate of Recognition,** Computer Network Club (COMNET), University of Baguio, Baguio City, Philippines. 2000
- **Certificate of Recognition**, University of Baguio Foreign Student's Association (UBFoSA), University of Baguio, Baguio City, Philippines. 2000.
- **Certificate of Recognition,** Sectoral Representative for Bangladesh, India, Pakistan, and Nepal, Saint Louis University Foreign Student's Association, Saint Louis University, Baguio City, Philippines. 2002.

INVITED TALKS AND EXTERNAL TRAININGS CONDUCTED

- Keynote Speaker, *The Art of Ethical Hacking: Safeguarding Systems Against Cyber Threats*, Seminar on Cybersecurity organized by the BASIS Students' Forum - Bangladesh University Chapter, December 9, 2024
- Speaker, *Safeguarding the Digital World*, Tech Talk on PU-CSE IT Fest 2024 organized by Premier University, Chittagong, Bangladesh, January 27, 2024.
- Speaker, *Future-Ready IT Education to Shape the Architects of the Digital Economy*, Digital Leadership Forum 2023 organized by Ministry of Digital Technologies of the Republic of Uzbekistan and IT Park Uzbekistan, July 7-8, 2023.
- Speaker. *Building cyber resilience for Bangladesh to counter cyber activities in Grey Zone*, International Seminar on Grey Zone Activities and Challenges for Bangladesh organized by Armed Forces Division, Prime Minister's Office, Government of the People's Republic of Bangladesh, June 4-5, 2023.
- Keynote Speaker, *Ethical Hacking and Penetration Testing*, Seminar organized by Ranada Prasad Shaha University, June 10, 2023
- Speaker, *Cyber Threats and Countermeasures*, BSHRM-Guardian Life 9th International HR Conference 2022, November 2022
- Trainer, *Masterclass on Ethical Hacking*, organized by Grameenphone Academy, October 27, 2022
- Tutorial Session Speaker, *Penetration Testing*, 2nd International Conference on Computing Advancements (ICCA), March 12, 2022
- Panel Speaker, *AI, Big Data and Cybersecurity for the Industry 4.0*, International Conference on 4th Industrial Revolution and Beyond (IC4IR 2021) organized by UGC, December 11, 2021
- Speaker, *Understanding the Cyber Security Issues and Challenges of Cyber Warfare*, International

Webinar organized by Amity University, India, December 11, 2021

- Keynote Speaker, *Cybersecurity: The War and the Defenders,* webinar organized by Bangladesh University, Dhaka, October 2021
- Tutorial Session Speaker, *Protecting IoT and OT from Cyber Attacks*, International Conference on Big Data, IoT and Machine Learning (BIM 2021), September 2021
- Speaker, *Challenges of Digital Higher Education in Bangladesh*, International Webinar on Higher Education in New Normal organized by the Mykolas Romeris University (MRU), Lithunia and the American International University-Bangladesh (AIUB), supported by the International Association of Universities (IAU) and the United Nations Academic Impact (UNAI), January 2021
- Tutorial Session Speaker, Working with Big Data: Tools, Techniques, and Practical Implementation, 1st National Workshop on Big Data and Machine Learning (BDML 2020), December 2020
- Master Trainer, *CCNP Enterprise Instructor Training for Singapore, Malaysia, and Indonesia*, Virtual Mode, October 2021
- Master Trainer, *DevNet Associate Instructor Training for Bangladesh, Sri Lanka, and Nepal*, Virtual Mode, September 2021
- Master Trainer, *Cybersecurity Operations Instructor Training for Bangladesh, Sri Lanka, and Nepal*, Virtual Mode, August 2021
- Master Trainer, *CCNA Instructor Training for Bangladesh, Sri Lanka, and Nepal*, Virtual Mode, July 2021
- Panelist, *Virtual Reality Careers – The Key to the Door*, VRCON Conference on AR, VR, MR, Game organized by Bangladesh Innovation Forum, December 2019
- Master Trainer, *CCNA Cybersecurity Operations Instructor Training*, Vasavi College of Engineering, Hyderabad, India, June 2019
- Master Trainer, *CCNA Cybersecurity Operations Instructor Training*, Asia Euro University, Phnom Penh, Cambodia, April 2019
- Master Trainer, *CCNA Cybersecurity Operations Instructor Training*, University of Petroleum and Energy Studies, India, June 2018
- Master Trainer, *CCNP Route Instructor Training*, Teralogic Solutions Sdn Bhd, Shah Alam, Malaysia, August 2017
- Master Trainer, *CCNP Route Instructor Training*, Politeknik Ungku Omar, Perak, Malaysia, November 2016
- Tutorial Session Speaker, *Site to Site IP Telephony*, 2016 Cisco NetAcad Conference Asia Pacific and Japan, Chiang Mai, Thailand, April 2016
- Speaker, *Campus Network Infrastructure Performance Monitoring & Security*, MEETBdREN 2016, University of Dhaka, April 2016
- Tutorial Session Speaker, *IPv6 Routing,* Instructor Retooling, Prime College, Kathmandu, Nepal, January 2014.
- Speaker, *Quality Assurance practices in Bangladesh,* QA Academy Meeting and Conference, ITE, Singapore, November 2011.
- Speaker, *e-Governance in Bangladesh: practice, readiness, way ahead,* Bangladesh Institute of Management (BIM), Dhaka, 2010
- Speaker, *e-Governance: The Global Perspective,* Bangladesh Institute of Management (BIM), Dhaka, 2010
- Speaker, *Quality Assurance Issues across Cisco Networking Academies in Bangladesh*, Cisco Networking Academy Bangladesh Country Conference and Retooling Session 2010 held at Bangladesh University of Engineering and Technology (BUET).
- Speaker, *Networking as a Career,* Dhaka University of Engineering and Technology (DUET), Gazipur,

Dhaka, 2010

- Speaker, *Green Computing,* Bangladesh University, Dhaka, Bangladesh, 2010
- Speaker, *Prospect of Networking career in Bangladesh*, East West University, Dhaka, Bangladesh, 2009
- Speaker, *21st Century Connected Education*, Stamford University, Dhaka, Bangladesh, 2009
- Speaker, *Networking Career Roadmap,* Northern University Bangladesh, Dhaka, Bangladesh, 2008

REFERENCES

Dr. Carmen Z. Lamagna

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