MD. MONERUZZAMAN

Senior IT Professional | Digital Transformation & GovTech Specialist
E-Governance Infrastructure Leader & Enterprise Systems Architect
Dhaka, Bangladesh | +8801710720117 | mone15.cse@gmail.com
Portfolio

PROFESSIONAL SUMMARY

Senior IT Professional and Programmer with 12+ years of expertise in IT management, digital implementation, software development, and network monitoring. Skilled in e-services coordination, IT infrastructure deployment, and business process re-engineering. Proven leadership in government digital transformation projects, technical training, and cross-functional team management. Recognized by the Directorate of Posts with the Certificate of Appreciation (Innovation Award) for innovating and implementing the Cheque Management System at Dhaka GPO. Published researcher and co-inventor of international patents focusing on identity anti-spoofing, AI-driven cybersecurity compliance, and smart contract-based threat mitigation. Medium of Instruction (MOI) for core higher education was English.

RESEARCH INTERESTS

- **Threat Intelligence & Analysis:** Threat intelligence, anomaly detection, automated incident response, and predictive modeling in distributed network systems.
- **Autonomous Security & Governance:** Autonomous cyber threat containment, blockchain-enabled governance, and decentralized fault-tolerant architectures.
- **Identity & Access Management:** Identity & Access Management (IAM), network perimeter security, and threat intelligence in public sector networks.
- **GovTech & Administration:** Scalable e-services, Business Process Re-engineering (BPR), and institutional policy frameworks for sustainable public administration.

ACADEMIC QUALIFICATIONS

Master of Science (M.Sc.) in Computer Science & Engineering
- Jahangirnagar University | Dhaka, Bangladesh | 2019
- Result: CGPA 3.75 / 4.00

Bachelor of Science (B.Sc.) in Computer Science & Engineering
- Hajee Mohammad Danesh Science & Technology University (HSTU) | Dinajpur, Rangpur, Bangladesh | 2009
- Result: CGPA 3.50 / 4.00

Higher Secondary Certificate (HSC)
- Badarganj Degree College | Badarganj, Rangpur, Bangladesh | 2005
- Result: GPA 4.60 / 5.00

Secondary School Certificate (SSC)
- Pathan Para High School | Badarganj, Rangpur, | 2003
- Result: GPA 3.94 / 5.00

RESEARCH EXPERIENCE

Research Assistant
CyberX Mentor | IT Training, Consultancy, Research & Scholarship | Dhaka, Bangladesh
2024 - Present
- Investigated automated cyber defense mechanisms in distributed networks; co-authored and evaluated smart contract architectures designed for zero-latency, rule-based threat containment and autonomous incident mitigation (ICAIS-2026).

- Contributed to core algorithm ideation and feature modeling for biometric/identity verification systems, culminating in a published United States Patent Application on preventing identity spoofing (US Patent Application No. US-20250285471-A1).
- Drafted, structured, and reviewed peer-reviewed conference proceedings, journal articles, and technical patent specifications in compliance with international publication and IP standards.

RESEARCH PUBLICATIONS & IP

Journal Articles

- **Md. Moneruzzaman**. "Strategic Framework for Effective System Implementation and Business Process Re-Engineering in ICT: Enhancing Organizational Performance through Institutional Gap Analysis and End-User Engagement." *International Journal of All Research Education and Scientific Methods (IJARESM)*, Volume 13, Issue 3, March 2025. **Link**
- **Md. Moneruzzaman**. "Transforming Societies Through ICT: Resource Management, Ethics, and Policy Design for Sustainable Development." *International Journal of All Research Education and Scientific Methods (IJARESM)*, Volume 13, Issue 3, March 2025. **Link**

Conference Proceedings

- Mohammad Arifin Rahman Khan, Abdur Rahman Sarker, Mohammad Shorfuzzaman, Md. Mahfuzur Rahman, Md. Sohel Rana, and **Md. Moneruzzaman**. "Blockchain and AI-Integrated Security Framework for Wireless Ad Hoc Networks Using Support Vector Machine (SVM)." *In Proceedings of the 12th International Conference on Electrical and Electronics Engineering (ICEEE-2025)*, Istanbul, Turkiye, September 2025. pp. 424-429. ***IEEE*.**
- Abdur Rahman Sarker, **Md. Moneruzzaman**, Zikra Amin, Md. Alif, Md. Nazmul Islam, and Mohammed Mafizul Islam. "Smart Contract-Based Automated Cyber Threat Response in Distributed Systems." *In Proceedings of the 6th International Conference on Artificial Intelligence and Smart Energy (ICAIS-2026),* Coimbatore, india, April 2026. Pp. 248-259. ***Springer***.
- Fateha Jannat Ayrin, Md Mizanur Rahman, Abdur Rahman Sarker, Mohammed Mafizul Islam, **Md. Moneruzzaman**, and Bushra Amin. "DAN or Inject? Unified Jailbreak and Prompt Injection Detection via Fine-Tuned Transformers." *In Proceedings of the 4th International Conference on Computing Advancements (ICCA-2026),* Dhaka, Bangladesh, October 2026. (Accepted for Publication in ***ACM)***

Book Chapters

- "Cryptocurrency's Disruptive Impact on the Global Banking System: Implications for Financial Stability and Regulation." **(Accepted, Minor Revision).**
- "Distributed Ledger Applications for Agronomic Commodity Provenance within Supply Network Frameworks." **(Accepted, Minor Revision).**

Patents

- Nithya Rekha Sivakumar, Thangavel Murugan, **Abdur Rahman Sarker**, Raja Varma Pamba, Mohammed Mafizul Islam, Zikra Amin, Sarika Saseendran, Md. Moneruzzaman, S.M.G. Azam, Syed Mohammed Tareq, Md Kamrus Samad, Mohit Tiwari, Md. Omar Faruque Reza, Syed Md Shamsul Alam, Balajee Jeyakumar, **Method and System for Preventing Identity Spoofing Using Artificial Intelligence Driven Pattern Recognition**," Patent No. US-20250285471-A1, 2025. https://patents.google.com/patent/US20250285471A1/en
- **Abdur Rahman Sarker**, Al Ibn Sina, Mohammad Minhaz Uddin, Sadia Jaman, Mehadi Hassan Sovon, Md. Arif Anzum, Md. Salman Rahman, Sazib Kumar Saha, Md Mostafa Jalal, Md. Moneruzzaman, Dr. Syed Mohammed Tareq, Md Alif, **"AI-Augmented Cybersecurity System for Regulatory Compliance in Energy Distribution,"** Patent No. DE 202025104956.2, 2025. https://register.dpma.de/DPMAregister/pat/register?AKZ=2020251049562

Op-Eds, Commentaries & Public Policy Articles

- Md. Moneruzzaman. *"অস্তিত্বের সংকটে ঢাকা জিপিও"* (Dhaka GPO in Identity Crisis). *Daily Jugantor*, May 21, 2025. **ePaper**
- Md. Moneruzzaman. *"আইসিটি সার্ভিস বাস্তবায়ন ও লাভ-ক্ষতি"* (ICT Service Implementation and Gains-Losses). *Daily Kalbela*, May 08, 2025. **ePaper**
- Md. Moneruzzaman. *"আইসিটি সার্ভিস বাস্তবায়নে সরকারের লাভ-ক্ষতি"* (Effort and Outcome in ICT Service Implementation for Government). *Daily Jugantor*, May 08, 2025. **ePaper**
- Md. Moneruzzaman. *"জনপ্রশাসনের ১৮ সুপারিশ বাস্তবায়ন ও প্রাসঙ্গিক কিছু কথা : প্রেক্ষিত আইসিটি সার্ভিস"* (Implementation of 18 Administrative Recommendations & Related Views: ICT Service Perspective). *Daily Kaler Kantho*, April 04, 2025. ePaper
- Md. Moneruzzaman. *"প্রধান উপদেষ্টা ঘোষিত ই-ফাইলিং কার্যকর হোক"* (Implementation of the E-Filing; Declared by the Chief Advisor). *Daily Samakal*, March 18, 2025. ePaper
- Md. Moneruzzaman. *"আইসিটি ক্যাডার হোক"* (Let There Be an ICT Cadre). *Daily Samakal*, September 29, 2024. **ePaper**
- Md. Moneruzzaman. *"ডিজিটাল বাংলাদেশ : নতুন বাস্তবতায় করণীয়"* (Digital Bangladesh: Steps to Take in the New Reality). *Daily Jugantor*, December 10, 2022. **ePaper**

TEACHING EXPERIENCE

Lecturer (Computer Science & Engineering)
University of Development Alternative (UODA) & ISTT | Dhaka, Bangladesh
May 2010 - June 2011

- **Academic Instruction:** Delivered comprehensive undergraduate-level lectures and structured course modules in core computing subjects, including Digital Logic Design, Operating Systems, and Computer Networks.
- **Student Mentorship & Research Guidance:** Supervised final-year student capstone projects, guided undergraduate thesis work, and encouraged exploratory technical research.
- **Curriculum & Assessment:** Designed course assessments, evaluated student performance, and fostered an interactive, practical learning environment aligned with modern computer science standards.

EMPLOYMENT HISTORY

Programmer
Directorate of Posts, Posts & Telecommunications Division, Ministry of Posts, Telecommunications and Information Technology | Dhaka, Bangladesh
August 2018 - Present

- Direct the design, optimization, and administration of core government IT systems and national digital services.
- Innovated and successfully deployed the **"Cheque Management System"** across Dhaka GPO, reducing service turnaround time and enhancing public customer satisfaction.
- Lead software lifecycle development, enterprise database administration, and server virtualization for high-availability production environments.
- Supervise network security operations, policy compliance, and cross-functional digital transformation initiatives.

Assistant Programmer
Ministry of Primary and Mass Education | Dhaka, Bangladesh
February 2016 - August 2018

- Managed IT enterprise software applications and database security protocols for nationwide primary education operations.
- Supported digital education initiatives, process automation, and system reliability.
- Conducted structured technical training workshops for ministry staff and field administration officers.

Assistant Maintenance Engineer

Planning Division, Ministry of Planning | Dhaka, Bangladesh
October 2015 - January 2016

- Supervised enterprise server infrastructure, storage arrays, and network uptime across ministry departments.
- Performed preventive maintenance, system upgrades, and advanced technical troubleshooting.

Assistant Hardware Engineer (Senior Officer)
Rupali Bank Ltd. | Dhaka, Bangladesh
February 2015 - September 2015

- Administered IT hardware infrastructure, network switching, and peripheral security across bank branches.
- Executed hardware diagnostic routines and delivered technical support to branch banking teams.

Assistant Programmer
BanglaGovNet Project, Bangladesh Computer Council (BCC) | Agargaon, Dhaka
July 2011 - February 2015

- Maintained National Data Center (NDC) operations, cloud computing infrastructure, and high-availability government connectivity.
- Collaborated with SK C&C (South Korea) to architect and implement core national e-governance backbones.
- Led technical infrastructure rollout and system commissioning for Union Information Service Centers (UISCs) nationwide.

VENDOR CERTIFICATIONS

MikroTik Certified Network Associate (MTCNA), 2025

- **Core Domain:** Fundamental Networking & RouterOS Administration.
- **Key Competencies:** TCP/IP configuration, bridging, routing setup, wireless network deployment, firewall configuration, NAT, DHCP management, and RouterOS user management, maintenance, and troubleshooting.

MikroTik Certified Routing Engineer (MTCRE), 2025

- **Core Domain:** Advanced Routing & Network Architecture.
- **Key Competencies:** Static routing, OSPF (Open Shortest Path First) implementation, VLAN configuration, point-to-point tunneling, IPsec VPN setup, and multi-path network design for enterprise-grade routing environments.

MikroTik Certified Security Engineer (MTCSE), 2025

- **Core Domain:** Network Security & Firewall Hardening.
- **Key Competencies:** Advanced firewall configuration, packet inspection, securing routers against cyber attacks, DoS/DDoS mitigation, traffic monitoring, secure tunneling, and implementing robust enterprise security policies using RouterOS.

PROFESSIONAL TRAINING

Practical Course for IT Engineers | SK C&C Company Ltd, South Korea (Mar 2013 - Apr 2013)

- **Core Focus:** Advanced ICT Infrastructure & Enterprise IT Solutions.
- **Key Learnings:** Gained hands-on international expertise in large-scale system integration, core e-governance infrastructure architecture, network optimization, and advanced IT management best practices under global technical standards.

Server & Storage Management | Huawei Bangladesh & Bangladesh Computer Council (Jun 2014 - Jul 2014)

- **Core Focus:** Enterprise Data Center Infrastructure & Storage Administration.
- **Key Learnings:** Acquired specialized technical knowledge in configuring, monitoring, and maintaining enterprise-grade servers and high-capacity storage arrays, ensuring high availability and fault-tolerant data center operations.

Fundamental Course for Linux | Bangladesh Computer Council - BCC (Feb 2014)

- **Core Focus:** Open-Source Operating Systems & Server Administration.

- **Key Learnings:** Developed robust competencies in Linux command-line operations, shell scripting, file system management, user permission controls, and foundational system security hardening for secure server deployments.

Office & Human Resource Management Training | Dhaka, Bangladesh (Jul 2011)

- **Core Focus:** Administrative Governance & Professional Workflow Management.
- **Key Learnings:** Enhanced administrative capabilities in institutional management, HR coordination, official correspondence, documentation workflows, and efficient public-sector office operations.

PROFESSIONAL RESOURCE ROLES

Implementation Team Leader | Union Information and Service Center (UISC), a2i, UNDP

- Directed field-level implementation and operational rollout of Union Information and Service Centers under the a2i and UNDP initiative.
- Coordinated with local administration and stakeholders to bridge the digital divide, ensuring grassroots access to digital public services.
- Monitored operational workflows, digital infrastructure setup, and capacity building for service entrepreneurs at the union level.

National Trainer | Electronic Government Procurement (e-GP), Government of Bangladesh

- Served as an official National Trainer for the centralized electronic government procurement (e-GP) platform.
- Conducted intensive capacity-building and hands-on training workshops for government officials, public procurers, and tenderers.
- Facilitated transparent, efficient, and compliance-driven public procurement practices across various government tiers.

Master Trainer | Grievance Redress System (GRS), Online Reporting System (ORS), & d-Nothi (Filing System)

- Acted as a Master Trainer for critical e-governance systems implemented by the Government of Bangladesh.
- Trained administrative officials and staff on paperless office management through the **d-Nothi (Filing System)** to ensure administrative efficiency.
- Guided stakeholders on transparent public grievance handling via the **Grievance Redress System (GRS)** and real-time data monitoring through the **Online Reporting System (ORS)**.

Solution Designer | Cheque Management System (GPO) & Land Management System (Bangladesh Post)

- Conceptualized, designed, and architected the automated **Cheque Management System** for Dhaka GPO, significantly reducing turnaround time and processing errors.
- Spearheaded the solution design for the **Land Management System** of Bangladesh Post to streamline real estate asset tracking, documentation, and record-keeping.
- Translated complex administrative bottlenecks into secure, user-friendly, and digital public workflows.

Team Leader | Out Country Voting System (OCV), National Election of Bangladesh (2026)

- Led the technical and operational team for the development and deployment of the Out Country Voting System (OCV) for the National Election.
- Designed secure authentication, remote registration frameworks, and data transmission protocols to facilitate expatriate voting.
- Ensured high security, data privacy, and system fault tolerance to maintain the integrity of national electoral processes.

Deputy Chief | Accessibility of Citizens Window Initiative, Bangladesh Post

- Coordinated strategic initiatives under the Citizens Window project to make postal services more inclusive and accessible to all citizens.
- Focused on barrier-free digital interface designs, citizen feedback mechanisms, and service transparency improvements.
- Bridged the gap between citizens and postal authorities through proactive digital engagement and user-centric service delivery frameworks.

HONORS & INNOVATION AWARDS

- **Certificate of Appreciation (উদ্ভাবনী স্বীকৃতি):** Awarded by the Director General, Directorate of Posts, for outstanding innovation and dynamic leadership in conceptualizing the "Cheque Management System" and successfully implementing it at Dhaka GPO (Memo: 14.31.0000.069.23.003.23.1870, Date: March 15, 2023).

TECHNICAL COMPETENCIES

- **Programming & Scripting:** Java, Python, C++, PHP, SQL
- **Database Management:** MySQL, PostgreSQL, Relational Schema Design, Database Performance Tuning
- **Operating Systems & Infrastructure:** Linux (Ubuntu/CentOS), Windows Server, Server Virtualization, Data Center Operations
- **Networking & Security:** MikroTik (Routing, Security, Tunneling), Cisco Networking, Firewall Configuration, TOSS, Network Traffic Analysis
- **Frameworks & Methodologies:** Business Process Re-engineering (BPR), Digital Service Implementation, E-Governance System Design

PROFESSIONAL AFFILIATIONS

- **Joint Secretary (Admin):** Government ICT Officer’s Forum, Bangladesh (Aug 2024 - Present)
- **Activist / Executive Member:** Government ICT Officer’s Forum, Bangladesh (Feb 2016 - Jul 2024)
- **Member:** Planning Body for the Digital Transformation of Bangladesh Post.
- **Life Member:** Bangladesh Computer Society (BCS)
- **Life Member:** Government ICT Officer’s Forum, Bangladesh

LANGUAGE PROFICIENCY

- **Bangla:** Native proficiency (High in Reading, Writing, and Speaking)
- **English:** Professional working proficiency (Professional in Reading, Writing, and Speaking)
- **Hindi:** Conversational proficiency (Functional in Speaking and Listening)

REFERENCES

Dr. Rajagopal Ponnusamy
Educator | Trainer | Motivator | Author | Consultant | Mentor | Community Leader
No. 18, Japan 6/11, Taman Karak Utama, 68100 Kuala Lumpur

- **Tel:** +6011 1971 9400
- **Email:** rajagopalsvs57@gmail.com

Dr. Md. Monirul Islam
Professor,
Department of Computer Science and Engineering
BUET, Dhaka, Bangladesh

- **Tel:** +880 1731 666995
- **Email:** mdmonirulislam@cse.buet.ac.bd