

MOHAMMAD SHAHEDUR RAHMAN

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OBJECTIVE

I am a Ph.D. student specializing in HPC & microservices in cloud environments, cybersecurity, machine learning, and Kubernetes autoscaling. I have 12+ years of experience in tech leadership, IT auditing, and risk management. I am proven in strengthening security frameworks for FinTech and government projects. I am eager to leverage advanced computing and security expertise to drive innovation in cloud computing, GRC, and distributed systems.

EDUCATION

Ph.D. in Computer Science The University of Texas at Arlington Arlington, TX Working on Resource autoscaling for the Microservice application in the Cloud	Fall 2023 - Present
M.Sc. in Information Systems Security (MISS) Bangladesh University of Professionals (BUP) Bangladesh Awarded with Chancellor's Gold Medal for outstanding performance in Academics	Feb 2018
M.B.A in Management Information Systems (MIS) The University of Dhaka (DU) Bangladesh	Dec 2016
B.Sc. in Computer Science & Engineering Bangladesh University of Engineering & Technology (BUET) Bangladesh	Feb 2011

TECHNICAL SKILLS

• Programming Language	Python, Bash, SQL, MATLAB, C, Jupyter
• Operating Systems	Linux, Kali Linux
• Cybersecurity Tools	Nmap, Nessus, Burp Suite, SIEM, SOAR, XDR, EDR, MDM, DLP
• Container Orchestration	Kubernetes (k3s, k8s), Docker, Docker Swarm, Prometheus, Linkerd, cGroup
• Cloud Computing	AWS (EC2, Lambda)
• Web Development	HTML, CSS, Bootstrap, MERN, MEAN, JavaScript, Flask, Jamstack

PROFESSIONAL EXPERIENCES & FEATURED PROJECTS

Working Domains: Financial Institutions, Government Projects (FinTech), Consultancy, Software Industry **Total 12+ years**

Graduate Student Researcher | The University of Texas at Arlington | Arlington, TX **Fall '23 - Present**

- Developed Kubernetes-based resource orchestration, optimizing microservice scalability and performance in cloud environments.
- **Contribution:** Designed early SLO violation detection to optimize CPU utilization, enhancing resource efficiency and reducing costs.

Chief Information Security Officer | BRAC Bank PLC | Dhaka, Bangladesh **Nov '22 – Aug '23**

- Directed projects, **SOC**, aligning cybersecurity strategies with business goals while fostering collaboration across cross-functionalities.
- **Contribution:** Executed ransomware prevention and XDR, protecting assets and ensuring their standing in the [GABV](#).
- **Implementation of Extended Detection and Response (XDR) Tools (Project Manager):** Oversaw XDR deployment, automating threat detection, enhancing collaboration, and optimizing security through seamless integration.
- **Real-Time Threat Detection & SIEM Integration Project (Project Manager):** Steered SIEM deployment, overseeing vendor selection, architecture, and integration to boost threat detection, streamline response, and ensure compliance.
- **Advanced Ransomware Prevention and Early Detection (Project Manager):** Deployed multi-layered security, patched vulnerabilities, and developed response plans to mitigate ransomware, enhance detection, and ensure swift recovery.
- **SOAR and Threat Intelligence Integration for Proactive Automated (Project Manager):** Automated incident response with SOAR-SIEM integration, creating playbooks to boost efficiency, performance, and threat intelligence.

National IT Security Consultant | Bangladesh Computer Council, funded by World Bank Group | Dhaka, Bangladesh **Jan '19 – Sep '22**

- Spearheaded initiatives to strengthen Bangladesh's cybersecurity, developing policies and ensuring multi-party collaboration.
- **Contribution:** Facilitated National Cybersecurity Strategy and IT frameworks, overseeing audits for critical infrastructures to ensure compliance with stringent security standards.
- **IT Auditing for Secure Digital Operations (Project Manager & Team Member):** Organized IT audits for National Data Centers (Tier- III & Tier IV) and toll plaza systems, ensuring secure operations and enhancing national data resilience and toll collection efficiency.
- **Bangladesh (BGD) e-GOV CIRT (Team Member):** Co-established a Cybersecurity Research Wing, contributed to the National Cyber Security Strategy, facilitated a Digital Forensic Lab, and supported risk assessments and cyber sensor deployment for critical infrastructures.

Assistant Vice President | Eastern Bank PLC | Dhaka, Bangladesh **Nov '16 – Dec '18**

- Orchestrated IT Security, driving strategy, overseeing threat detection, and integrating advanced technologies to secure the infrastructure.
- **Contribution:** Drove PCI-DSS compliance, implemented 24/7 SIEM to safeguard data and mitigate threats and thrived as a security leader.
- **PCI-DSS Compliance and Security Enhancement Project (Team Member):** Piloted PCI-DSS implementation, managing risk assessments, gap analysis, and security controls to safeguard payment data, align teams, and ensure compliance through continuous monitoring.
- **Enterprise SIEM Deployment and Incident Response Initiative (Team Member):** Contributed to SIEM implementation, architecture design, and real-time monitoring setup to enhance threat detection, incident response, and organizational security.

Assistant Manager (Cybersecurity) | KPMG Bangladesh “Big Four” | Dhaka, Bangladesh

Feb ‘15 – Nov ‘16

- Led security audits, risk assessments, and IT policy development, aligning with ISO standards, managing SLAs, and streamlining workflows.
- **Contribution:** Secured Payment Systems at Bangladesh Bank and fortified IT infrastructure for major banks through comprehensive audits.
- **Financial Systems Security Assurance Project (Project Manager & Team Member):** Assisted in IT security audits for Bangladesh Bank and significant institutions, Core banking, and ERP security, ensuring compliance and strengthening resilience.

Senior Programmer (ERP Security) | IBCS-Primax Software (Bangladesh) Limited | Dhaka, Bangladesh

Jan ‘14 – Feb ‘15

- Ensured database security and ERP integration by managing backups, encryption, vulnerability scans, and compliance with data regulations.
- **Contribution:** Implemented ERP solutions, ensuring seamless delivery and enhancing operational efficiency across multiple organizations.
- **Oracle JD Edwards Implementation and Optimization (Team Member):** Supported Bangladesh's first Oracle JD Edwards implementation, managing business analysis, process optimization, database security, and system integration across key modules

IT Specialist (Security) | IBM Bangladesh | Dhaka, Bangladesh

Oct ‘12 – Dec ‘13

- Facilitated security analysis and integration, aligning solutions with business goals and enhancing database security through monitoring.
- **Contribution:** IBM's services ensured seamless operations for Airtel Bangladesh, enhancing customer experience with precision.
- **Airtel Bangladesh IT Operations and Security Support Initiative (Team Member):** Secured Airtel's critical applications and supported IT projects, driving operational growth as Bangladesh's second-largest mobile operator through IBM.

PROFESSIONAL CERTIFICATIONS

- **Project Management** PMP, Six Sigma Black Belt, PRINCE2 Practitioner
- **GRC** CRISC, ISO 27001 Lead Implementer, ISO 27701 Lead Implementer, ITIL-Foundation
- **IT Audit** CISA, ISO 27001 Lead Auditor, Advanced Auditing CSA Star, PCI-DSS Implementation
- **Information & Cybersecurity** ISC2 CC, C|TIA, C|EH, ISO 27032 Lead Cybersecurity Manager, C|SCU, C|BP

AWARDS AND ACCREDITATIONS

- **STEM Tuition Support:** Honored with a renowned STEM scholarship covering all tuition and fees, alongside a Graduate Teaching Assistantship offer for academic excellence. Fall 2023 – Present
- **Chancellor's Gold Medal:** Recipient of the prestigious Chancellor's Gold Medal, awarded by the President of the People's Republic of Bangladesh, for achieving top honors at the master's level, 2020.
- **Gold Medal:** Received a distinguished gold medal for exceptional performance in 12th grade, awarded by the Janata Bank PLC Employees Benevolent Fund Managing Committee, 2007.
- **IT Engineers Examinations (ITEE):** Participated in a competitive examination to support the vision of Digital Bangladesh and earned the distinguished ITEE certification, awarded by JICA.
- **Professional Memberships:** Silver Member (ISACA), Member (PMI, EC-Council), Life Member (Institute of Engineers, Bangladesh, Bangladesh Computer Society).

CO-CURRICULAR ACTIVITIES

- **Leadership Traits** Fall Leadership Retreat 2024, Team Certification Program: 2023
- **Engagements** Major League Hackathon: HackUTA, Programming Contest, Code Warrior Challenge, Global Grounds
- **Coaching** Cybersecurity Mentoring
- **Talks** Tech Leadership Dialogue
- **Games & Sports** Agility and Strategy through Sports