MD KAUSAR HAMID MIJI

+1 (605) 510-8583 ⋄ write2miji@gmail.com ⋄ https://www.linkedin.com/in/md-miji/ ⋄ South Dakota, USA.

EDUCATION

South Dakota School of Mines and Technology   Expected May, 2024
M.Sc in Computer Science and Engineering   **Award: Ivanhoe Fellowship — GPA 3.8**
Coursework: Introduction to Data Science, Machine Learning, Feedback Control Systems, Cybersecurity, Enterprise Security Management, Networking & Data Communication, etc.

Chittagong University of Engineering & Technology   Mar 2009 - Oct 2013
B.Sc in Electrical and Electronic Engineering   **CGPA 3.12**
Coursework: Engineering Mathematics, Power System Analysis, Digital Communication System, Digital Electronics etc.

PUBLICATION

Mohammad, Nur, Md Kausar Hamid Miji, and Prodipto Chowdhury, **"Assisted Vehicle Driving Embedded with Autonomous Security System"**, 2015, published in 2nd International Conference on EICT, KUET, Bangladesh.

PROJECTS

- **Anomaly Detection Model:** Developed an anomaly detection model based on simulated data gathered from popular software in the loop tool ArduPilot. The model achieved 93% accuracy in detecting anomalous data for a ground rover.
- **Kerberos Protocol:** Presented about the popular Kerberos Protocol suite, which is a secure authentication protocol used in computer networks. Provided a high-level overview of how it enables users and services to prove their identities to each other securely, preventing unauthorized access and protecting data from eavesdropping and tampering.
- **Vulnerable and Outdated Components from the OWASP Top 10:** Delivered a presentation, highlighting the critical importance of identifying and addressing these vulnerabilities in software applications. Also discussed the potential risks associated with outdated components and emphasized the need for proactive measures to secure the software against known vulnerabilities.
- **Design and implementation of GPON Network:** Designed and implemented optical distribution network, installed and commissioned optical line terminal to provide high speed internet and IP based telephony service for the first time in district level in Bangladesh.
- **Optical Backbone Installation:** Installed and commissioned 24 core optical fiber backbone, and optical distribution frame for Optical Add-drop Multiplexer to secure seamless connection between districts.

WORK EXPERIENCE

Graduate Assistant   Aug 2022 – Present
South Dakota School of Mines and Technology   Rapid City, SD

- Developed anomaly detector using Long Short-Term Memory for unmanned autonomous vehicles.
- Conducted exploratory data analysis for Mission Planner Telemetry Logs.

Assistant Manager (Technical)   Mar 2016 - Jun 2022
Bangladesh Telecommunications Company Limited   Dhaka, Bangladesh

- Verified and validated various security requirements, including Password & IAM Policies, ensuring strict compliance with security policies and standards, and generated detailed reports complete with recommendations.
- Conducted comprehensive vulnerability assessments and penetration tests to identify and mitigate security risks.
- Facilitated effective communication and information sharing across departments to enhance security awareness, fostering a culture of security collaboration.
- Analyzed security audits meticulously, investigating and documenting security incidents for proper reporting and resolution.
- Contributed to new product design & marketing by providing constructive customer feedback.
- Installed host-based antivirus software and maintained meticulous documentation, including patch upgrades, ensuring system integrity and traceability.
- Led a high-performing team of 40 technicians, inspiring them to efficiently identify and resolve faults in the OFC backbone according to SLA standards.
- Designed and executed the Optical Distribution Network (ODN) for GPON Service, enhancing network capabilities and improving service delivery.
- Managed, guided, and controlled telecommunication services, conducted regular inspections of various physical assets, ensured strict adherence to maintenance schedules for all assets under jurisdiction to guarantee seamless operations and service reliability, while efficiently managing allocated funds.

- Took charge during major system breakdowns, providing hands-on guidance to subordinates until systems were fully operational.
- Maintained harmonious relationships between management and employees, effectively addressing employee demands, grievances, and appeals to ensure a productive work environment.
- Executed diverse tasks and responsibilities as assigned by the Deputy General Manager, demonstrating adaptability and commitment to organizational goals.

Network Engineer   Dec 2014 - Jan 2016
Systems Solutions & Development Technologies Limited   Dhaka, Bangladesh

- Configured router, switch, optical network unit, optical line terminal, routing protocols, bandwidth profiler, charging gateway, etc. at different layers of network, planned and executed IP strategies for DO, POP, and client devices.
- Monitored databases (MS SQL Server, SQLyog) and network performance using tools like Nagios, Cacti, OTRS, GC Portal, System KPI, QoS, Upstream and Downstream Bandwidth to ensure proper bandwidth allocation for customers.
- Worked closely with the Fiber Team to facilitate installations of DO, POP, and Client End Device etc.
- Vigorously monitored NMS events, collected logs to analyze data for decision making and prepared technical reports.
- Scrutinized User Network Interface's problems and proposed solutions to those problems.

Assistant Engineer   Jan 2014 –Dec 2014
DigiCon Telecommunications Company Limited   Dhaka, Bangladesh

- Managed 24/7 trouble ticket handling, efficiently segregating customer problems, resolved, escalated, or re-routed customer issues as per responsibility.
- Vigilantly monitored System KPI, QoS, upstream and downstream capacity, traffic, transmission level network (IPLC, ITC, IP BW, ICX) alarms, signaling link and Link and Card Status of Soft-switch (Genview C3).
- Provisioned realm, codec profile, calling plan, and routing on need basis end point & carrier for voice service.
- Extracted and Verified call detail record (CDR) reports from the Billing GUI.
- Generated reports for Alarm and Fault Analysis of the Equipment and Escalation.
- Prepared and analyzed SIP trace and VoIP signal and other need-based Technical Reports.

SKILLS AND INTERESTS

Technical Skills	Python, TensorFlow, Keras, Scikit-Learn, Deep Learning, Linux, Nessus, Git, SQL, Microsoft Office
Soft Skills	Leadership, Team Player, Active Listening, Problem Solving, Critical Thinking
Interests	Reinforcement Learning, Transformer Models, Generative Adversarial Models, IT, Cybersecurity

PROFESSIONAL DEVELOPMENTS

- Training on Leadership Development: President's Leadership Academy, SDSM&T   2023
- Cybersecurity Roles, Processes & Operating System Security by IBM at Coursera   2023
- Introduction to Cybersecurity Tools & Cyber Attacks by IBM at Coursera   2023
- Python for Data Science, AI & Development by IBM at Coursera   2023
- Training on VMware vSphere: Install, Configure, Manage (V7), Conducted by vMWare, Inc (Online)   2022
- Introduction to Cloud Security by Google, Self-learning from Coursera (Online)   2021
- ZTE GPON Product Advance Operation and Maintenance, Conducted by ZTE Corp   2021
- Cyber Security & Risk Management (Online), Conducted by Digital Point Technologies Inc.   2021
- Training on "MSPP Equipment and System," Conducted by FiberHome at Telecommunication Staff College, Dhaka. 2016
- Basic Training Course on Telecommunication, Administrative & Financial Rules, Conducted by BTCL.   2016

COMMUNITY INVOLVEMENT

- **Founding General Secretary** at BTCL Engineers Association.   Jan 2019 – Jun 2022
- **Associate Member (A16588)**, Institute of Engineer's, Bangladesh   Dec 2015 – Jun 2022