

Md Omer Danish

[Email](#) | [Linkedin](#) | [Website](#)

William N. Pennington Engineering Building, Reno, Nevada

RESEARCH INTERESTS

Security and Privacy in AI (Agent) and Decentralized Systems, Trustworthy ML, HCI

EDUCATION

University of Nevada, Reno <i>Ph.D. in Computer Science and Engineering</i>	Aug' 24 - Present
Bangladesh University of Engineering and Technology <i>Bachelors in Computer Science and Engineering</i>	Mar'16 - Feb '21

PUBLICATIONS

Pre-Prints

- [IEEE ICDCS 2026, Under Review] Md Omer Danish, Sammy Tesfai, Minmei Wang, Haofan Cai and Xiaoxue Zhang. **CrossZK: Privacy-Preserving Cross-chain Verification For Multi-Enterprises Blockchain.**

PRESENTATION

- [CYBER AI: 2025 UNR Cybersecurity Conference] Md Omer Danish, Xiaoxue Zhang. **ZKSynergy: Interoperable Blockchain Privacy.** (*2nd Place Best Poster Award*)

RESEARCH WORK

Telecom Customer Churn Rate Prediction with ML <i>Techtrioz</i>	Jun '21 – Dec '21
Internet Availability, Adoption, and Prediction of Future Demand in Bangladesh <i>The Bangladesh National ICT Household Survey</i>	Mar '18 – Jun '19
Design of a Decimal to IEEE-754 Converter using Verilog <i>Undergraduate Research with Professor Dr. Md. Mostafa Akbar</i>	Oct '18 – Dec '20

EXPERIENCE

Graduate Research Assistant <i>UNRcyber Lab: University of Nevada, Reno</i>	Aug '24 – Present
<ul style="list-style-type: none">• Privacy-Preserving Blockchain Transfers: Investigating security and privacy challenges in decentralized systems by developing zero-knowledge proof-based mechanisms for multi-enterprise asset transfers.• Decentralized LLM Payment Protocols: Designing privacy-preserving token payment protocols to ensure security, privacy, and fairness between service providers and users within decentralized LLM ecosystems.• Alert Wildfire: Applying machine learning and edge computing to camera-based surveillance systems to enhance real-time detection and response for wildfire events.	Reno, USA
Big Data Security Engineer <i>Techtrioz</i>	Mar '21 - Jul '22

Dhaka, Bangladesh

- **CyberShield** (*PySpark, MLlib*): A big data system processing billions of network records daily to provide an admin dashboard. Detects anomalies and intrusions using machine learning.
- **Data Segregation** (*.Net, C#*): Built a system using the .Net framework to process PDF reports and automate the generation of desired data summaries.
- **TruckShare Plus**: Developed an Android application for collaborative resource utilization in logistics, resulting in a 25% reduction in transportation costs.

TEACHING EXPERIENCE

Graduate Teaching Assistant

Spring 2026, Fall 2025

CS 446/646 – Principles of Operating Systems

TECHNICAL SKILLS

Languages: C/C++, Python, Java, SQL, Verilog, Assembly 8086, CSS

Libraries: Pyspark, NumPy, Pandas, Matplotlib, Seaborn, Tkinter, OpenCV

Database: MySql, Cassandra, Oracle

Scripting: LATEX, HTML, CSS, Javascript, bash, shell

IDE: IntelliJ IDEA, NetBeans, Eclipse, Visual Studio, VS Code, Code Blocks, AVR studio, PyCharm, Navicat

Tools: Wireshark, Cisco Packet Tracer, SEED Ubuntu, Git, Docker, Jira, Bitbucket

STANDARDIZED TEST SCORES

GRE : 312 (Q-164, V-148, AWA-3)

TOEFL : 100 (L-28, R-25, S-23, W-24)

AWARDS AND ACHIEVEMENTS

- 2nd Place Best Poster Award, 2025 UNR Cybersecurity Conference 2025
- General Scholarship from Bangladesh Government 2016 – 2021
- Talentpool Scholarship from Bangladesh Government 2014 – 2015