

Muhammad Zain

Cybersecurity Enthusiast

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SUMMARY

Cybersecurity enthusiast with a Software Engineering background, skilled in **Python, C, Bash, C#, Java, and SQL**. Proficient in **Linux, cloud platforms, and security tools**. Experienced in intrusion detection and secure networking, with strong interest in **cyber risk supervision, digital fraud detection, and incident response**. Dedicated to applying technical expertise to protect digital infrastructure and contribute to national cybersecurity resilience.

EDUCATION

Bachelors of Software Engineering

Bahria University

OCT 2021 - JULY 2025

CGPA: 3.75

- Granted Provisional Merit Scholarship for Spring 2025 Semester.

EXPERIENCE

DFIR and GRC Intern

JUNE 2025 - JULY 2025

Trillium Information Security Systems

- Investigated security incidents and attack scenarios using **Windows Event Viewer, Hayabusa, Zircolite, Chainsaw**, IDS tools, and vulnerability scanners like **Qualys and Kaspersky**.
- Presented **technical risk assessments, CIS benchmark reviews**, and collaborated in **change management, Business Continuity Plans, Disaster Recovery Plans, and Business Impact Analysis** activities.
- Completed full **CompTIA Network+ and Security+** training, applying core principles in network defense, threat management, GRC operations, and learned about **ISO 27000 family** standards.

Full Stack Developer Intern

OCT 2023 - NOV 2023

NexinIT

- Developed web services and applications using ASP.NET MVC, Entity Framework, and SQL Server; utilized HTML, CSS, JavaScript, jQuery, AJAX, Bootstrap, and REST APIs; managed version control with GitHub and deployed on MS Azure.

ACADEMIC PROJECTS

Intelligent Cyber Attacks Detection System – Final Year Project

OCTOBER 2024 – JUNE 2025 – github.com/mzainxo/ICADS

- Integrated **ML-based anomaly detection** with **Suricata IDS** for detection of sophisticated **DDoS** attacks.
- Achieved **99% accuracy** on offline model testing and **78–94% accuracy** in live network environments for real-time DDoS attack identification and mitigation.
- Resolved **static signature limitations** by embedding adaptive learning, reducing dependence on manual rule updates.

Realtime Phishing Emails Detection System – Web Application

NOV 2024 – DEC 2024 – github.com/mzainxo/Phishing-email-detection-using-ML-and-NLP

- Built a **web-based phishing detector** using TF-IDF and Random Forest Classifier with **95% accuracy**.
- Introduced contextual, feature-driven **ML detection** to outperform **traditional spam filters**.

Enterprise Network Design of Dubai Airports – Packet Tracer

DECEMBER 2023 – JANUARY 2024 – github.com/mzainxo/Network-Design-for-Airport

- Designed a secure, scalable network with VLANs, multilayer switches, routers, and EIGRP for efficient inter-VLAN routing; implemented DHCP, static IPs for critical devices, and secure guest Wi-Fi with controlled segmentation.

Vehicle Trading System – Windows Forms App

MAY 2023 – JUNE 2023 – github.com/mzainxo/VehicleTradingSystem

- Developed a C# Windows Forms app with SQL Server backend, securing user credentials via **password hashing and encryption**, preventing **SQL injection** with parameterized queries, and implementing **role-based access controls**.

SKILLS & TOOLS

Networking & Security: Suricata, Windows Event Viewer, Kaspersky, Zircolite, Chainsaw, Nmap, Wireshark, Burp Suite, Tcpdump, Tcpreplay, Cisco Packet Tracer, Synk, Qualys, Metasploit.

Programming Language: C#, Java, Python, C, Bash, Assembly, SQL, HTML, CSS, JavaScript, and XML.

Tools & Platforms: VMware, Azure, AWS, Postman, GitHub, MS office.

Operating Systems: Linux, Windows

Standards: ISO 27001, ISO 27002, ISO 27005

CERTIFICATIONS

- **IBM Application Security for Developers and DevOps Professionals** – *Coursera*
- **Certified in Cybersecurity (CC)** – *ISC2*
- **Google Cybersecurity Professional Certificate** – *Coursera*
- **Japanese 5S Methodology Training** – *Toyota x UNAP*

VOLUNTEERING

Marketing and Creative Lead (Farewell) – *Software Engineering Dept., Bahria University*

MARCH 2024 – MAY 2024

Volunteer at Heatwave Relief Camps – *FGRF*

MAY 2022