

Ahmed Umar Rehman

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Summary

Cybersecurity undergraduate at FAST-NUCES Islamabad with hands-on experience in malware analysis, digital forensics, and web development. Skilled in Python, C++, C#, SQL, and modern web technologies. Proficient with tools like Wireshark, Metasploit, Autopsy, YARA, OWASP ZAP, and VirusTotal. Strong foundation in AI, blockchain, and cloud security, with a proven ability to solve complex problems and collaborate effectively in technical teams.

Technical Skills

Core Skills:

Frontend Development: React.js, Next.js, HTML, CSS

Backend & Database Management: SQL Server Management Studio, Supabase, Google Firebase

Blockchain Development & Security: Hash chains, transaction integrity, wallet security, RPC hardening

Cryptography & Data Protection: SHA-256 hashing, Fernet encryption, wallet file encryption/decryption

Artificial Intelligence & Machine Learning: NLP, multi-label classification, TF-IDF vectorization, model evaluation

Cybersecurity Operations: Digital forensics, vulnerability assessment, SIEM monitoring

GUI Development: Tkinter

Professional Documentation: Word, IEEE conference papers, Excel, PowerPoint

Tools & Technologies:

Programming Languages: Python, C++, SQL, JavaScript

Blockchain Libraries: CryptoJS, Python Cryptography

AI & Data Processing: scikit-learn, NLTK, GoogleTranslator API, gTTS

Cybersecurity Tools: Autopsy, Wireshark, FTK Imager, Nessus, YARA, Metasploit, OWASP ZAP, IDA Free, Detect It Easy, Wazuh

Version Control & Deployment: GitHub, Vercel

Operating Systems: Kali Linux, Ubuntu, Windows

Programming: Python, C++, SQL, JavaScript, C#

Education

FAST NUCES Islamabad
Cadet College Hasan Abdal

BS Cyber Security, Expected 2026
FSc (Pre-Engineering), 2020–2022

Industrial Experience

Cybersecurity Intern – EMRChains [\[LINK\]](#)

Jun 2025 – Aug 2025

- Developed and deployed secure healthcare and chat systems using Blockchain, AI, AES-GCM encryption, and Firebase.
- Implemented SIEM threat detection with Wazuh, resolving installation and configuration challenges.
- Strengthened expertise in cybersecurity operations, secure software design, and frontend development with React & Tailwind CSS.

AI Web Development Intern – Nexium [\[LINK\]](#)

Jul 2025 – Aug 2025

- Developed full-stack applications using Next.js, Supabase, and deployed via Vercel.
- Built AI-powered tools including AI Quote Generator, AI Blog Summarizer, and Mood Tracker with magic link authentication.
- Ensured secure authentication, optimized database queries, and created responsive UI designs.

University Projects & Experience

Filmception AI: Movie Summary System (Python, NLP) — *Artificial Intelligence Project* [\[LINK\]](#) May 2025

- Developed an AI-powered system using Python and NLP techniques to preprocess movie summaries, predict genres with a `LogisticRegression` model, and visualize genre distributions.
- Implemented multi-language translation (Hindi, Korean, Urdu, Arabic) using `GoogleTranslator` and generated high-quality audio with `gTTS`, storing outputs in a structured database.

Network Topology and Routing System (CISCO) — *Computer Networks Project* [\[LINK\]](#) Dec 2024

- Designed and implemented a network topology using VLSM to efficiently allocate IP addresses across multiple routers and devices, ensuring optimal subnetting.
- Configured RIP, OSPF, and EIGRP routing protocols, achieving successful routing and redistribution between Network A and Network B, and implemented DHCP for dynamic IP assignment.

Football League Management System (C#, SQL Server) — *Database Systems Project* [\[LINK\]](#) Dec 2024

- Developed a Windows Form application using C# in Visual Studio 2022 as the frontend, delivering an intuitive interface for managing football league data.
- Designed a robust backend with SQL Server Management Studio, leveraging SQL queries for efficient data storage and management.

GYM Website (React, Firebase) — *Web Programming Project* [\[LINK\]](#) May 2024

- Developed a dynamic and responsive GYM website using React and React Router, implementing seamless navigation and an engaging user interface.
- Integrated Google Firebase for scalable database management, enabling efficient storage and retrieval of user and gym-related data.

Vehicle Auction System (C++) — *OOP Project* [\[LINK\]](#) Dec 2023

- Designed a modular system using encapsulation, inheritance, and polymorphism, implementing abstract classes and virtual functions to manage vehicle listings and user interactions efficiently.
- Utilized operator overloading and composition to streamline data input/output and organize complex vehicle data, enhancing system usability and maintainability.

Professional Development

Mastercard Cybersecurity Virtual Experience Program – Forage [\[LINK\]](#) Jan 2025

- Identified and reported phishing threats in a simulated environment.

Data Analytics & Commercial Insights – Forage [\[LINK\]](#) May 2025

- Analyzed transaction datasets to derive actionable business insights.

Certifications

- Blockchain Security – INFOSEC (Jun 2025) [\[LINK\]](#)
- Google Cybersecurity Specialization – Google (Jun 2025) [\[LINK\]](#)
- Google Data Analytics Specialization – Google (May 2025) [\[LINK\]](#)
- Introduction to Security Principles in Cloud Computing – Google (Jun 2025) [\[LINK\]](#)
- AI For Everyone – DeepLearning.AI (Aug 2023) [\[LINK\]](#)

Soft Skills

Problem-Solving & Persistence | Adaptability | Communication Skills | Time Management | Multitasking | Collaboration

Languages

Spoken: English (Fluent), Urdu (Native)