Muhammad Ali Asghar

+92 323 8482727 [asgharmali313@gmail.com](mailto:asgharmali31@gmail.com) https://www.linkedin.com/in/ali-asghar---/

## Objective

Passionate Computer Science undergraduate at FAST NUCES with a strong foundation in competitive programming, software development, Cyber Security, linux, and low-level programming. I am eager to apply my technical skills and problem-solving abilities in a professional setting while continuing to support my loved ones.

# EDUCATION

**Bachelor of Computer Science**, FAST NUCES CGPA: **3.84** Expected 2026

# SKILLS

**Technical Skills** C,C++, ASM, Embedded Programming, MERN Stack, Android Development, MSSQL, Python, Cyber Security, Linux, Git & Github

**Soft Skills** Problem Solving, Critical Thinking, Leadership, Adaptability, Communication

# EXPERIENCE

**MSP – Miniature Student Portal**

* **Description:**  
  Developed a compact student portal that enables teachers to manage student attendance, evaluations, and grades efficiently. This project was implemented using basic procedural programming, focusing on developing core functionalities typical to an academic management system.
* **Key Features:**
  + User authentication and role-based access for teachers.
  + Attendance tracking and record updates.
  + Evaluation and grade management with data persistence.
* **Skills Learned:**
  + Fundamentals of procedural programming and structured design.
  + Basic user interface (UI) design for form-based applications.
  + Data management and logic implementation for educational tools.

**Social Networking App**

* **Description:**  
  Designed and built a social networking application inspired by platforms like Facebook to reinforce object-oriented programming (OOP) principles. The app supports features such as profile creation, friend connections, status updates, and messaging between users.
* **Key Features:**
  + User registration, login, and profile management.
  + Social interactions including friend requests and news feed updates.
  + Basic messaging functionality to simulate real-time communication.
* **Skills Learned:**
  + Object-oriented design and class-based development.
  + Implementation of encapsulation, inheritance, and polymorphism.
  + Database integration for managing user data and social interactions.
  + Emphasis on code reusability and maintainability in larger applications.

**Jumping Rabbit 8088 Assembly**

* **Description:**  
  Developed a side-scrolling game titled "Jumping Rabbit" using 8088 assembly language, executed via DOSBox. The project served as an exploration of low-level programming, providing insights into system operations, memory management, and efficient hardware utilization.
* **Key Features:**
  + Sprite-based movement and smooth side-scrolling mechanics.
  + Basic collision detection and game loop control.
  + Integration of simple sound effects using legacy DOS programming techniques.
* **Skills Learned:**
  + Low-level programming in assembly language.
  + Detailed understanding of memory management and processor instructions.
  + Use of DOSBox for emulating legacy software environments.
  + Practical insights into system architecture and performance optimization.

**Tech 911 – MERN Stack Web Application**

* **Description:**  
  Created Tech 911, a comprehensive e-commerce web application inspired by giants like AliExpress and Amazon. This platform allows users to browse products, manage shopping carts, and place orders in a dynamic, real-time environment.
* **Key Features:**
  + User authentication, product search, and filter functionalities.
  + Real-time data handling and asynchronous processing.
  + Shopping cart and payment simulation functionality.
* **Skills Learned:**
  + Full-stack development using the MERN (MongoDB, Express, React, Node.js) stack.
  + RESTful API design and implementation.
  + Front-end development with React, including state management and component-based architecture.
  + Back-end development with Node.js and Express for efficient server handling.
  + Database management with MongoDB, including schema design and query optimization.

**5. MeetSphere – Desktop Application in Qt**

* **Description:**  
  Developed MeetSphere, a cross-platform desktop application using the Qt framework, designed to facilitate real-time video conferencing and remote screen sharing. Similar to Zoom, this tool offers robust chat functionality and collaborative features for virtual meetings.
* **Key Features:**
  + Video and audio conferencing integrated into a unified desktop interface.
  + Chat functionality with real-time text messaging.
  + Screen sharing and remote control capabilities to enhance collaborative sessions.
* **Skills Learned:**
  + GUI application development with Qt for cross-platform environments.
  + Network programming for real-time communications and data exchange.
  + Event-driven programming and managing multimedia integration.
  + Debugging and optimization strategies for high-performance desktop applications.

## Achievements

* + **Rector’s List:** Fall 2023 (4.00 GPA, **Gold Medalist**)
  + **Dean’s List:** Fall 2022 | Spring 2023 | Spring 2024 (3.94 GPA, **Silver Medalist**) | Fall 2024
  + **ICPC** Online Preliminaries 2024 (**Silver Medal**)