Maha Asghar

Email: mahaasghar55@gmail.com | LinkedIn: LinkedIn Profile | Phone: +92 3345244258

Education

Bachelors in Artificial Intelligence FAST-NUCES
Expected Graduation: 2027
O/A-Levels Beaconhouse School System
2018 - 2023
- Achieved Gold Medal in both O-Levels and A-Levels
- Merit-Based Scholarship

Skills

Programming: Python, C++, C#, SQL,R
Web Development: HTML, CSS, Bootstrap, WordPress, Shopify
AI & Processing: Exploratory Data Analysis, Computer Vision, Natural Language Processing, Audio Processing, Web Scraping, AI Algorithms, Prompt Engineering
Tools & Libraries: Visual Studio Code, Visual Studio 2022, Jupyter Notebook, MySQL, Git, Node.js, MongoDB, NoSQL, Flask, Pandas, NumPy, OpenCV, Streamlit, GLUT, ncurses, LaTeX, File Handling, Proteus (Simulation Tool), etc.
Microsoft Office Skills: Word, Excel, PowerPoint, Access
Soft Skills: Problem-solving, Teamwork, Communication, Punctuality

Projects

Smart Traffic Management System (C++, Data Structures & Algorithms)
Graph-based traffic optimization using Dijkstra's, A, hash tables, and priority queues for real-time pathfinding and congestion reduction.
Web Scraping & AI Based Review Analysis (Python, Streamlit)
Scraped competitor reviews, applied Prompt Engineering for sentiment analysis, and built a Streamlit dashboard for real-time insights.
Brick Breaker Game (C++, GLUT, OOP, Game Development)
Developed a classic arcade-style Brick Breaker game using object-oriented programming with the GLUT library. Implemented interactive gameplay with paddle movement, collision detection, and dynamic brick destruction.
The Unseen Journey Quest (C++, Game Development, DSA)
Developed for DSA coursework — a grid-based puzzle adventure game with undo mechanics using stack and scoring system. Implemented the game grid using a multi-linked list and integrated hints using the City Block Distance algorithm. Used ncurses for terminal-based UI.
FlavorFind (C#,App Development)
Developing a recipe-based application with key features including user authentication, personalized favorites, dynamic recipe display, review page, menu planner, and an interactive ingredient checklist.
Street Fighter II Game Bot (Python, Machine Learning, MLP)
Built a dataset by capturing game states (player positions, health, etc.) and corresponding player actions. Trained a Multi-Layer Perceptron (MLP) classifier to predict the optimal sequence of button inputs based on current game state then integrated MLP model into the bot framework.

Relevant Courses

- Artificial Intelligence & Programming for AI
- Data Structures and Algorithms & Database Systems
- Object Oriented Programming & Fundamentals of SE

Certifications & Awards

- AI For Everyone - DeepLearning.AI
- Gold Medal, A-Level
- Gold Medal, O-Level

Extracurricular Activities

- Participant, FSPC Coding Competition (FAST-NUCES)
- Participant, DLD Circuit Designing Competition (FAST-NUCES)
- Member, GDSC FAST (PR Internals)
- Volunteer, SOS Children's Village (8 weeks)