



ALI SHAHZAIN ABBASI

Junior Developer | Data Analyst

About Me

Data-driven developer with a keen interest in machine learning, passionate about bridging the gap between complex data and clear insights. Proficient in programming languages and data analysis tools, aiming to leverage machine learning to address real-world challenges. Committed to continuous learning and adaptability, I look forward to making a positive difference in the world through the application of emerging technologies and software development practices.

Education

Bachelor of Sciences in Computer Science 2021-2025

National University of Computer and Emerging Sciences (FAST) Islamabad

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Islamabad, Pakistan

Skills

- Front-End & Back-End Development
- Data Analytics
- Market Research & Analysis
- Database Development
- Problem Solving & Critical Thinking
- Communication Skills

Software Proficiency

- Excel, PowerPoint
- Visual Studio, VS Code
- Oracle SQL Developer
- Microsoft SQL Server
- Linux/Ubuntu
- Google Collab Labs

Languages

- C/C++
- Python
- SQL/MySQL
- HTML/CSS
- C#

Projects

Close-Knit Community Service Sharing System (02/2024 - Present)

- Developed using Java, this system enhances community engagement by enabling members to share services efficiently.
- The project involved extensive design phases from ideation through implementation, focusing on creating a platform that fosters local collaboration and support.

Apna Cafe-Management System (10/2023 - 11/2023)

- Engineered a user-centric management system to optimize operations in a campus cafeteria.
- This solution utilizes SQL for robust data management and features a dynamic, interactive dashboard created with C# and Visual Studio Forms, improving operational flow and customer service.

Inventory Management System with AVL Trees (10/2022 - 11/2023)

- Designed an advanced inventory management system employing AVL Trees for rapid and efficient data access.
- This system ensures high performance in inventory tracking and management, crucial for maintaining accurate stock levels and facilitating swift operational decisions.

OlaDoc - Hospital Management System (05/2022 - 06/2022)

- Developed an interactive healthcare system using object-oriented programming principles in C++.
- The system enhances patient care management through efficient scheduling, record management, and interaction capabilities, demonstrating the application of advanced programming techniques in real-world health solutions.



AI-Based Timetable Scheduling Project

- Created an innovative AI-driven timetable scheduling system using Python and genetic algorithms to solve the timetabling problem with minimal clashes.
- This project involved developing a system that adheres to various hard and soft constraints, optimizing the scheduling process for academic institutions.

Multi-Agent System OS Simulation Project

- Developed a simulated multi-agent operating system managing 50 autonomous robots, using C++.
- This system incorporated inter-process communication, process synchronization via semaphores, and comprehensive memory management to facilitate accurate and efficient information exchange and task execution among robots.

Network Design and Configuration Using Cisco Packet Tracer

- Spearheaded the design and implementation of a comprehensive network using Cisco Packet Tracer as part of a Computer Networks course.
- This project included configuring IP addressing, subnets, various routing protocols such as EIGRP, OSPF, and RIP, and applying VLSM for optimal IP space management. Additionally, implemented NAT and ACLs to enhance network security and traffic management.

Volunteer Experience

VICE HEAD INFORMATION'S | IEEE FAST COMPUTER CHAPTER FAST UNIVERSITY | 2022

- Managed information flow and communication within the chapter and coordinated exchanges between committees and project groups.
- Facilitated the member recruitment process and ensured effective communication across departments.

COORDINATOR, TEAM INFORMATION AND COORDINATION FAST UNIVERSITY | NASCON-2023

- Contributed to the successful execution of NASCON 2023, a premier tech event with over 12,000 attendees.
- Enhanced information dissemination and resource allocation for over 100 events.

