

Ahmed Baig

+92 334 522 0789 | ahmedbaig137@gmail.com

linkedin.com/in/ahmedbaig1282 | github.com/Ahmed-1282 | ahmed-1282.github.io

TECHNICAL SKILLS

Languages: C/C++, Java, Python, JavaScript, TypeScript, GO, HTML/CSS

Databases: MySQL, PostgreSQL, MongoDB

Technologies: Node.js, NestJS, React.js, Express.js, Web3.js, Flask, AWS, Twilio, Docker, Jenkins, Github Actions

EDUCATION

National University of Computer and Emerging Sciences

Bachelor of Science in Computer Science

Islamabad, Pakistan

2020 – 2024

EXPERIENCE

Backend Specialist

BaKhabar Kissan (BKK)

June 2025 – Present

Islamabad, Pakistan

- Designing and implementing end-to-end database and system flow architectures, laying the foundation for scalable and maintainable applications.
- Developing robust, high-performance backend systems and APIs using Node.js and Python to drive core business functionalities.
- Engineering and maintaining complex ETL pipelines, ensuring reliable and efficient data extraction, transformation, and loading across multiple systems.
- Architecting and implementing system-level performance enhancements by analyzing and reducing time/space complexity, designing parallel execution workflows, and making systems dynamically scalable.
- Leading deep-dive optimizations of database performance, specializing in advanced SQL and PostGIS spatial query tuning (Materialized Views, spatial indexing, complex Joins).
- Proactively identifying, diagnosing, and resolving complex data and system-level bottlenecks (API, database, ETL) to ensure high throughput and low latency under significant load.
- Driving ecosystem-wide performance optimization across 9 projects, enhancing both backend services (Node.js/Python) and database efficiency to ensure holistic system scalability.
- Spearheading the complete, end-to-end backend architecture and development for 5 key projects.
- Leading the entire frontend development lifecycle for 3 critical portals using React, from initial design through to deployment and integration.

Full Stack Engineer

QLU.ai

Aug 2024 – May 2025

Islamabad, Pakistan

- Developed and enhanced production-level features using NestJS, React, React Query, Postgres, and Twilio, ensuring scalable and efficient web applications.
- Designed and implemented communication systems, including incoming/outgoing calls and messaging, by integrating Twilio's API for seamless user interactions.
- Optimized API performance and data processing, enabling efficient handling of 80,000+ data items in a single API call through algorithmic improvements and database optimizations.
- Built and expanded core functionalities such as anonymous contact handling, contact notes, and real-time messaging, significantly improving user experience and workflow efficiency.
- Developed a **real-time chat application** using WebSockets and the PERN stack, ensuring low-latency communication and robust performance.
- Resolved complex technical challenges, including enhancing API efficiency, improving data processing algorithms, and ensuring smooth operations in high-traffic environments.

Fellowship Associate - Backend

Fasset

June 2024 – Aug 2024

Islamabad, Pakistan

- Contributed to the developing a **Flexible Transaction Fee System** for Fasset, implementing JWT authentication, Redis caching, and input validation using Sequelize ORM (PostgreSQL).
- Gained expertise in MVC backend architecture while collaborating with Fasset's national and international teams during the fellowship.
- Collaborated with Fasset's international and national teams, providing technical expertise and insights during decision-making processes.

Backend Development Intern

MRS Technologies

July 2023 – Aug 2023

Islamabad, Pakistan

- Contributed to the development of a **IoT-based microgreens plant system** for the MVP project.
- Designed and implemented backend using AWS Amplify, DynamoDB, GraphQL for data integration, and AWS Lambda for user sign-up via Cognito. Selected as one of the top 15 interns out of 13,000 candidates.

Web Development Intern

Musketeers Tech (Private) Ltd

Aug 2022 – Sept 2022

Lahore, Pakistan

- Contributed to the development of a **Pet Store Management System** using the MERN stack.
- Collaborated on full-stack development using MERN, Docker, and Git/GitHub.

PROJECTS

FYP - TranspaRent | *MERN, Web3, Solidity, AWS, Terraform, Flask, Ganache, JWT*

- Revolutionized property rentals with a blockchain-driven platform for streamlined, secure, and compliant tenant agreements. Enabled AI-driven analytics for market pricing.
- Collaborated on a high-level architectural solution, integrating smart contracts for dispute resolution and real-time agreement validation.

CERTIFICATIONS

Fundamentals of Remote Sensing (NASA)	2025
AWS Academy Microservices and CI/CD Pipeline Builders (AWS)	2024
freeCodeCamp: Back End Development and APIs	2023
freeCodeCamp: JavaScript Algorithms and Data Structures	2022
Datacamp: Introduction to Python	2022