Mohan Singh
Beginner Backend Developer Intern

SUMMARY

A proactive software engineer with a specialty in backend development and competitive programming. Proficient in Java, C++, Python, JavaScript, SQL, and skilled in using backend technologies such as Node.js, FastAPI, Flask, and Django, with basic knowledge in Spring Boot. Extensive practice with databases like PostgreSQL, MySQL, and MongoDB and tools such as Docker, Git, and Postman. Exhibits a strong foundation in computer science education with B.Tech majoring in AI and Data Science. Demonstrates experience in RESTful API design, MVC architecture, and unit testing, having applied these in practical projects like SheRide cab app and Dijkstra & A* Pathfinding Visualizer. Acknowledged for technical prowess by ranking Top 10 in the Smart India Hackathon 2024 and reaching the finals in SUSTAIN-A-THON 2024. Holds a solid grasp of software engineering principles, evidence by hands-on project experience and achievements in the field.

TECHNICAL SKILLS

Main Technical Skills	Java, C/C++/C#, Python, JavaScript, SQL
Programming Languages	Java, JavaScript, Python
C++ Libraries and Tools	C/C++/C#
Databases & Management Systems / ORM	SQL

WORK EXPERIENCE

Backend Developer Intern, SheRide Cab App Improvement

Duration: Jun 2024 – Aug 2024
Summary: Refactoring of backend logic and improvement of SheRide cab application's efficiency.
Responsibilities: Refactored backend logic using REST APIs, overhauled database layer to fix latency issues, designed gender-based driver allocation algorithm.
Technologies: REST APIs

Dijkstra & A* Pathfinding Visualizer

Summary: Creation of a Visualizer for Dijkstra & A* Pathfinding algorithms.
Responsibilities: Developed backend logic for shortest-path computation, designed backend routing for path computation APIs.
Technologies: React.js, Node.js

Participant, CoalSafe – Mine Safety and Monitoring System

Summary: Development of a full-featured RESTful API for a mine safety and monitoring system.
Responsibilities: Built RESTful API for user, tasks, and logs management, utilized MongoDB, implemented alert-based workflows and access control.
Technologies: Python, MongoDB

Brain Tumor Detector

Summary: Developed a Flask API for classifying MRI brain scans using a YOLOv8 model.
Responsibilities: Developed classification API for MRI brain scans with high accuracy, optimized backend for fast image processing.
Technologies: Flask, YOLOv8

EDUCATION

- **Galgotia's University, Greater Noida**
  B.Tech in Computer Science (AI and Data Science)
  Aug 2022 – Present
- **Aggarwal Public School, Faridabad**
  Intermediate (CBSE) – Percentage: 88.8%
  Apr 2020 – Jul 2021

CERTIFICATION

- **Smart India Hackathon 2024**
  Ranked Top 10 for CoalSafe backend infrastructure.
- **SUSTAIN-A-THON 2024**
  Finalist (Certificate).