

Hiring software engineer as easy as calling a taxi.

# Mohan Singh

## 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.

### SKILLS

<b>Main Technical Skills</b>	Java, C/C++/C#, Python, JavaScript, SQL
<b>Programming Languages</b>	Java, JavaScript, Python
<b>C++ Libraries and Tools</b>	C/C++/C#
<b>Databases &amp; Management Systems / ORM</b>	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).

