

HARSH MAHAJAN

harshmahajan2345@gmail.com | linkedin.com/in/mahajan-harsh | github.com/HarshMN2345

EDUCATION

Maharaja Surajmal Institute of Technology

Bachelor of Technology in Computer Science And Engineering

- **CGPA:** 8.74

New Delhi

Nov. 2022 – Present

TECHNICAL SKILLS

Programming Languages: TypeScript, JavaScript, C/C++, Java, Python, Golang, SQL

Development: React, React Native, Node.js, Express.js, Spring Boot, REST APIs, GraphQL, MongoDB

Tools: AWS (EC2, S3, Lambda, RDS, CloudFormation, IAM), Docker, Kubernetes, Git, GitHub Actions, CI/CD Pipelines, VS Code, IntelliJ IDEA, Postman, Jest, Mocha, Chai, JUnit, Selenium

CS Fundamentals: Data Structures & Algorithms, Object-Oriented Programming (OOP), Computer Networks, Operating Systems, Computer Architecture

Non-Technical Skills: Communication & Cooperation, Level-headed, Adaptability, Problem Solving

EXPERIENCE

SDE Intern

July 2024 - Nov 2024

KLJ Group

New Delhi

- Built a dynamic query system for structured and unstructured data using Retrieval-Augmented Generation (RAG) pipelines and NLP, improving data retrieval efficiency by 30% and reducing query response time by 25%.
- Designed a news insights module using Selenium for web scraping and SPGCI APIs, applying Large Language Models (LLMs) and classical NLP techniques to extract and analyze news data.
- Contributed to the email microservice of the Crystal application using Spring Cloud, enhancing platform functionality and preparing it for alpha testing and official launch.

Full Stack Intern

Oct 2023 – Dec 2023

Purezza Technologies

Remote

- Developed and deployed features for a wholesale e-commerce platform using the MERN stack (MongoDB, Express.js, React, Node.js) and Tailwind CSS, improving user experience and platform functionality.
- Contributed to the development of a job portal service, implementing clean architecture principles to enhance maintainability and scalability of the codebase.

PROJECTS

Aword - Real-Time Messaging Platform | *Next.js, Express.js, Apache Kafka, Redis, PostgreSQL*

Date

- Built a scalable messaging platform using Next.js and Express.js, handling 1K+ concurrent users with Apache Kafka and Redis for real-time messaging and secure authentication (JWT, OAuth). [GitHub Link]

SprintBoard - Workflow Orchestration Platform | *Next.js, Node.js, PostgreSQL, Prisma, AWS*

Date

- Developed a workflow platform using Next.js and Node.js, enabling task automation and real-time project tracking for 100+ users with PostgreSQL and Prisma for database management. [GitHub Link]

Custom Shell in Golang | *Golang*

Date

- Implemented a custom shell in Golang supporting command execution, path navigation, and redirection, achieving 97% accuracy in command parsing and execution. [GitHub Link]

OPEN-SOURCE EXPERIENCE

Swirl - Search Provider for Vespa

Oct 2023 – Nov 2023

GitHub

Remote

- Developed a search provider for Vespa within Swirl, earning recognition and a \$100 reward for the contribution. [GitHub Link]

Novu-python

Oct 2023

GitHub

Remote

- Enhanced Novu-python by implementing missing workflow endpoints, resolving issues, and improving API documentation. [GitHub Link]