Akhil

New Delhi, India   📞+918447004959   ✉ akhilas.singh@gmail.com   in akhilhind   ⌂ akhilhind

TECHNICAL SKILLS

Programming Languages/Frameworks: NodeJS, Python, Javascript, Typescript, Flask, Nest.js, ExpressJS
Database: MongoDB, MySQL, Cassandra, Redis, Qdrant Vector DB
Cloud Platform: Amazon Web Services, Microsoft Azure, Google Cloud Platform (GCP)
Others: Git, Docker, Kubenetes, Elasticsearch, Kibana, RabbitMQ, Data Structures and Algorithms

WORK EXPERIENCE

SDE-2
Rooter.gg, Delhi, India   *December 2024 - Present*

- Added functionality to earn **2x rewards** by completing daily tasks in the rooter.gg e-sports and gaming app.
- Scaled **Kubernetes cluster** to handle approximately **100,000 concurrent viewers** on the application.
- Implemented **HLS support** in the streaming service, enabling users to stream content in **multiple resolutions (480p, 720p, 1080p)** based on their network bandwidth.

Senior Engineer
Nagarro, Gurugram, India   *October 2020 - December 2024*

- Developed **RESTful APIs** using **Node.js and Python**, serving **2 million requests** per day.
- **Led the GenAI assistant** project to answer user queries by searching for relevant information from the database, handling about **2,000 queries per second.**
- Designed and implemented **Redis** and **Qdrant** clusters, ensuring scalability and high availability, resulting in a **40% improvement** in response times and a **99.9%** uptime rate.
- Replaced **Elasticsearch** with **Qdrant vector store**, **improving** search efficiency by **20%**.
- Developed a **Redis library** to manage conversation history and logs in cache.
- Created a **RabbitMQ message queue** to process and send about **2,000 WhatsApp messages** per second.
- Adopted test-driven development methodologies, achieving approx **98% code coverage** with comprehensive **unit test cases**.
- Developed and implemented **cloud functions** and **cloud schedulers** on **GCP** to fully automate and schedule data transfer jobs, achieving **100% automation** in the data transfer process.
- Deployed a **CI/CD** system using **GitLab**, replacing manual deployment and reducing integration and deployment time by up to **200%.**

PERSONAL PROJECTS

🔗 GenAI Assistant   2024
OpenAI API, Python, Qdrant Vector Store

- Built a **GenAI-based** assistant using **OpenAI GPT-4, Qdrant Vector Store, and Python** allowing users to interact in multiple languages and ask queries from **50+** documents.
- Implemented advanced functionalities such as **bill payments** for electricity and **car parking bookings** directly through **WhatsApp** and the **chat UI**.
- Integrated the assistant with **Whatsapp** using Twilio.

EDUCATION

Dr. A.P.J. Abdul Kalam Technical University   Lucknow, UP, India
Bachelor of Technology in Computer Science and Engineering   *Aug 2016 - Sep 2020*

ACHIEVEMENTS

- 🔗 Codechef: 3-star rating (max.1796).
- 🔗 Leetcode: Solved 600+ questions and achieved a rating of 1666 by participating in rated contests.

CERTIFICATIONS

- 🔗 Rest APIs with Flask and Python
- 🔗 Data Structures and Algorithms