Ayush Kumar Singh

EDUCATION

Indraprastha Institute of Information Technology, Delhi, India

August 2020 - May 2024

Bachelor's of Technology - Computer Science and Engineering

GPA - 7/10

Work Experience

GEP Worldwide

Jan 2024 – Present

Software Developer | React Native, Redux, ASP.NET, Microsoft SQL Server

Mumbai, India

- Spearheaded the integration of the **Field Services** app into the **Smart** application, enhancing functionality and streamlining workflows.
- Revamping the **Smart app's architecture**, transitioning from legacy systems to a scalable, high-performance structure.
- Overseeing and maintaining the **Inventory app**, managing bug fixes and ensuring stable performance until integration into the Smart platform.

GEP Worldwide [Certificate]

May 2023 - July 2023

Software Engineer Intern | C#, Microsoft SQL Server

Navi Mumbai, India

- Developed a console application to automate bulk data uploads from Excel to **Microsoft SQL Server**, reducing manual effort and improving data accuracy.
- Implemented robust data validation pipelines, enhancing operational efficiency and reliability.
- Deployed the application to production after thorough testing in **DEV** and **UAT** environments.

IIITD - Ph.D. Management Portal [Github] [Video Link]

Jul 2023 – Dec 2023

Web Developer | ReactJS, Django, TailwindCSS, SQL

Delhi, India

- Designed and deployed the **Ph.D. Management Portal**, automating administrative tasks such as student database management, stipend tracking, and exam duty allotment.
- Engineered the Exam Invigilation Algorithm, operational since March 2023, successfully managing 7+ exam seasons.

Networks Lab, IIITD (Ministry of Rural Development) [Github]

Jan 2023 – May 2023

Researcher | Appium, Java, Charles Proxy, MITM Proxy

Delhi, India

- Automated testing of the **LokOS** mobile application using **Appium**, identifying performance bottlenecks under varying network conditions.
- Proposed solutions like data compression, resumable uploads, and network-based fragmentation to improve data upload reliability.

PROJECTS

Distributed and Scalable: URL Shortener [Github]

July 2024

Personal Project | React.js, Express.js, MongoDB (Azure), Apache ZooKeeper, Nginx, Docker

- Designed and implemented a **distributed URL shortener** with high availability, fault tolerance, and optimized performance using **Docker** and **NGINX**.
- Leveraged **Apache ZooKeeper** for efficient counter management, enabling robust scalability across distributed systems.

Personal Portfolio Website [Github] [View Website]

Nov 2024

Personal Project | ReactJS, TailwindCSS, Vite, GitHub Pages

- Designed and developed a responsive and interactive **portfolio website** to showcase my skills, projects, and professional achievements.
- Deployed the website on **GitHub Pages**, ensuring seamless accessibility and efficient hosting for live demonstrations.

Other Projects

- Face-ID Auth Website: Developed using FaceNet model with Keras, enabling biometric login and registration.
- 3D-Printer VR Model: Integrated eye-tracking to evaluate user behavior in VR environments for CTML research.
- Jira Agent: Developed an AI Agent to assist developers with query resolutions by analyzing historical JIRA data.

CERTIFICATION AND ACHIEVEMENTS

- Certified in Azure Fundamentals [Certificate]
- Secured Runner-up in GEP Techathon (Dec 2024) for the JIRA AI Agent project.
- Leetcode Rating: 1655 [Profile]
- Secured AIR 1421 in JEE Mains (2020)
- Secured AIR 6 in Indian Institute of Aircraft Engineering (2019)