UMANG ARORA

Experience

Software Engineer, Acuity Knowledge Partners

Dec 2023 - Present

- Spearheaded the development of two key projects while delivering over 80 enhancement stories, directly elevating user functionality and experience based on feedback in testing phases.
- Developed and launched a reusable Code Library named **User-Management Package**, reducing user-management process complexity, while seamlessly integrating into 12 projects.
- Optimized system architecture for two major projects using LLD, Factory, and Flyweight patterns, resolving key performance bottlenecks.
- Gained hands-on experience with Gen AI and OpenAI API by contributing to a document-processing system, learning how PDFs were uploaded and queried for extracting relevant insights.

Full Stack Developer, Kazam EV Pvt Ltd

Feb 2023 - Dec 2023

- Engineered a robust server-side application for the Kazam client, leveraging **ApexCharts** for dynamic bar and circular graphs, while implementing an infinite scroll dashboard with more than 50 companies data of sessions, usage, online/offline, Online Percentage/Charger.
- Contributed to the company's main product by creating a new interface and backend, which boosted system performance by 40%.
- Integrated WebSockets for real-time communication, supporting 3 key use cases: IoT Device Management, Transactions, and **Online Status Tracking**.
- Tech Stack: Next.js, React JS, TypeScript, MongoDB, Spring Boot, Java, Node.js, RabbitMQ, Redis, WebSockets.

Projects

Music WebApp GitHub Link

React, Redux, Node.js, MongoDB, Socket.io

- Developed a user-friendly interface enabling seamless song playback and dynamic playlist management.
- Implemented secure password reset functionality with OTP verification via email (1-minute expiration) to enhance account security.
- Enabled real-time song discussions by integrating WebSockets for live commenting on tracks.

DFS-BFS Shortest Path Visualizer GitHub Link

Golang, Gin, React.js, Tailwindcss, Algorithms

- Built a full-stack application that allows users to interact with a 20x20 grid to visualize shortest path computations.
- Implemented DFS and BFS algorithms in the backend using Go to efficiently determine the optimal path.
- Designed an interactive frontend that dynamically highlights the computed shortest path for better visualization.

Low-Level Design (LLD) Patterns GitHub Link

Design Patterns, LLD

- Designed and implemented various Creational, Behavioral, and Structural design patterns with simple code examples.
- Simplified code examples demonstrating practical applications of these patterns with Readme.md files of every pattern.

Technical Skills

Programming Languages: C, C++, JavaScript, TypeScript, Java, Python

Frameworks & Tools: ReactJS, NextJS, NodeJS, Redux, ExpressJS, Spring Boot Gen AI, PyTorch, OpenAI API

Databases: MongoDB, PostgreSQL, MySQL, Redis

DevOps and Tools: AWS (S3, Lambda, CodePipeline, CodeArtifact), Docker, Git, SonarQube, Jest, React Testing Library, Husky Software Engineering Concepts: Data Structures& Algorithms, Microservices, Design Pattern, HLD, LLD, System Design, Scalability

Education

Masai School Jan 2022 - Dec 2022

Full Stack Development

Grade: A+

Completed a rigorous Full Stack Developer training program, delivering 9 major applications and over 40 supplementary projects utilizing JavaScript, Node.js, React.js, Redux, TypeScript, Express.js, and MongoDB to enhance coding proficiency.

Graphic Era Dehradun

Aug 2018 - Jun 2021

Bachelors in Commerce

CGPA: 7.96/10

Awards and Certificates

- Star of the Quarter at Kazam EV: Delivered a client product for TVS ahead of schedule, contributing to securing \$500k in funding and positioning Kazam EV as an industry leader; collaborated with managers to align project goals and deliverables.
- Machine Learning and Deep Learning Specialization on Coursera.

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