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EDUCATION

Delhi Technological University (Formerly DCE)

Aug 2018 - May 2022

B. Tech in Engineering Physics (Major in Electronics)

New Delhi, India

EXPERIENCE

Goodspace.ai

Oct 2023 - Oct 2024

Software Development Engineer (Full Stack - MERN)

Noida, India

- Implemented **real-time, bidirectional communication** between candidates and the **AI interviewer (LLM)** using **Socket.io**, achieving **~350ms response latency** for human-like interactive interview sessions.
- Integrated **Redis caching** to reduce server load and cut average API response times by **50%**, allowing the platform to handle **100K+ API requests per month** without performance degradation.
- Incorporated **BullMQ** for asynchronous job queue management (e.g., **interview scoring and transcript processing**), executing **thousands of background tasks per day** and improving overall system throughput and stability.
- Built an **event-driven notification and analytics pipeline** using **Apache Kafka**, powering real-time **SMS/WhatsApp alerts** and ensuring reliable cross-channel delivery of user notifications.
- Leveraged **Docker** to containerize the MERN stack and streamline **CI/CD pipelines**, reducing deployment time by **50%** and improving consistency and reliability of releases.
- Enhanced feed and search capabilities by implementing **semantic vector embeddings** with **OpenSearch**, delivering highly relevant results to **1M+ users** and boosting user engagement.
- Developed a **single-page application** using **React** with **Redux** for state management, providing a seamless, responsive user experience.

IOSD Ventures Pvt Ltd

Jan 2022 - Sept 2023

Software Development Engineer (Full Stack - MERN)

New Delhi, India

(Internship: Jan 2022 – Jun 2022 | Full-time: Jun 2022 – Sept 2023)

- Developed and maintained robust **RESTful APIs** using **Node.js**, **Express.js**, and **MongoDB** for two flagship platforms—**PlacementSaga** (coding interview prep) and **IOSD Portal** (educational membership site)—ensuring efficient data handling and scalable architecture.
- Implemented **full-stack features** with the **MERN stack**, building dynamic **React.js** front-end components and state management logic to deliver a seamless user experience across both platforms.
- Integrated **OAuth 2.0** social logins (**Google & GitHub**) across both platforms to streamline user onboarding and strengthen account security, improving the overall sign-up experience for users.
- Integrated **Judge0 compiler** to enable secure, **sandboxed code compilation** and evaluation within PlacementSaga's **browser-based code editor**, allowing users to submit and test coding problems seamlessly.
- Analyzed **user engagement** metrics and collected user feedback to drive continuous UI/UX improvements, refining navigation flows and feature designs that led to higher user satisfaction and retention.

Gramin Vikas Education Society

May 2021 - Aug 2021

Web Development Intern (Frontend)

Charkhi Dadri, Haryana, India

- Developed a responsive school **website** frontend using **ReactJS**, improving user experience for students, staff, and administrators.
- Integrated **Firebase** backend to digitally track and manage daily student attendance, increasing administrative efficiency.

PROJECTS

Lex Arbitra

Jan 2025 - Present

Backend Developer (NodeJS, Express, FastAPI) - Freelance

Boston, USA

- Deployed a **semantic search model** leveraging **Docker**, **FAISS**, and serialized **pickle files**, creating efficient **FastAPI** endpoints accessed through a **Node.js backend**, enabling seamless integration for legal research.
- Processed and converted 40,000+ court judgments** into structured and precise **HTML documents**, assigning unique identifiers to elements for **accurate highlighting** aligned with model outputs, significantly improving user experience and search accuracy.
- Actively contributing to ongoing **R&D efforts** in backend architecture (**Node.js**, **MongoDB**) and model integration (**FastAPI**, **FAISS**), optimizing the legal domain-specific model for enhanced accuracy and usability.

Bilzo Labs LLP

Apr 2024 - Jun 2024

Full Stack Developer (MEVN) - Freelance

Bengaluru, India

- Developed **progressive web apps** using **Vue.js** and **Nuxt.js**, enhancing mobile user experience, which led to an increase in user retention.
- Implemented dynamic and context-driven **routing** mechanisms within large-scale applications using **Nuxt.js**, facilitating more efficient **navigation and state management**.
- Utilized **Vuex** for **centralized state management** in Nuxt.js applications, improving data consistency in complex scenarios.

SKILLS

Languages: C++, C, Javascript ES6, Python, SQL, HTML, CSS, Typescript

Technologies: NodeJS, ExpressJS, ReactJS, Redux, MongoDB, MySQL, VueJS, Vuex, Tailwind CSS, AJAX, AWS, Docker, Nginx, Git, Redis, BullMQ, Elasticsearch, Socket.io, Apache Kafka, React Native, FastAPI

Concepts: REST API, Regex, Websockets, MVC Architecture, Agile & Scrum, UI/UX, HTTP/HTTPS, TCP-IP/UDP, Database Management Systems, Operating System, Linux, Design Patterns, OOPS, Algorithms, Full Stack Development