Mack Verma

Education

Indian Institute of Technology (BHU)

2023

Varanasi, Uttar Pradesh

DAV Public School

2018

CBSE (XII)

B. Tech

Ghaziabad, Uttar Pradesh

Experience

Antier Solutions May 2023 – Present

Software Engineer

Mohali, Punjab

- Spearheaded the development and optimization of microservices and APIs within a distributed system architecture using **NodeJs**, **NestJS**, and **TypeScript**, significantly enhancing system performance and scalability.
- Worked with relational (SQL) and NoSQL databases, and utilized Redis for caching. Achieved a 70% improvement in system efficiency through optimized queries.
- $\bullet \ \ \text{Implemented event-driven communication using } \textbf{RabbitMQ} \ \ \text{and} \ \ \textbf{gRPC} \ \ \text{for seamless microservices interaction}.$
- Authored smart contracts in **Solidity** and gained extensive experience with Ethereum-like blockchains, developing a deep understanding through extensive interaction and integration with these platforms.
- Conducted extensive research in **DeFi** space, including **Uniswap** protocols, **Ethereum** core workings, **MEV**, and **mempool** dynamics. Developed **mathematical equations** and **algorithms** to optimize strategies.

Summer Intern April 2022 – July 2022

Web Development Intern

Varanasi, Uttar Pradesh

- Developed an intuitive video and document sharing platform, **Research Hub**, using **React** and React-Bootstrap for the front-end, with Material UI for a sleek design.
- Implemented user verification through JSON Web Token for enhanced security.
- Engineered a robust REST API using **Node.js** and Express for the back-end, with data storage and retrieval managed on **MongoDB Atlas**.

Projects

Full Stack Note-Keeper App | React, MongoDB, NodeJS

November 2020

- Engineered a comprehensive Full Stack Note-Keeper App using the MERN stack, enabling users to create and store notes seamlessly with **MongoDB**.
- Implemented the front-end using **React** and React-Bootstrap, with Material UI enhancing the designs for the website.
- Developed a RESTful API utilizing NodeJs and Express for the back-end, ensuring efficient storage and retrieval of user data and notes in MongoDB.

Technical Skills

Languages: C++, C, JavaScript, TypeScript, SQL, Solidity

Tools and Technologies: NodeJs, NestJs, MYSQL, React, RabbitMQ, Github, Redis, gRPC, Docker

Areas of Interest: Data Structures and Algorithms, Problem Solving, Distributed systems, System Design, Blockchain, DeFi

Familiar with: Linux, Golang, Python, AWS

Achievements / Extracurricular

- IIT-BHU Chess Team Captain: Led the team in national and international tournaments, including:
 - Gold Medal in Spardha 2021
 - Bronze Medal in Udhgosh 2021
 - Runner-Up in Kasparov Cup
- Coding Competitions: Solved 1000+ problems on platforms such as Codechef, Leetcode, Codeforces.