Meet Patel

Education

Birla Institute of Technology and Science, Pilani

2020 - 2024

B.E. in Computer Science

Minor in Finance

Coursework: Database Systems, Object Oriented Programming, Data Structures and Algorithms, Cryptography, Operating Systems, Security Analysis and Portfolio Management

Experience

Associate Software Engineer Intern

Bengaluru, India Jul 2023 – Dec 2023

Digicert, Inc.

• Successfully parallelized Cypress test automation reducing E2E testing time by 90%(3+ hours to 30 mins)

- Contributed to front-end development by creating functional components for using React/JavaScript/CSS
- Configured .json files to ensure proper access control resolving IDOR vulnerabilities for 3 customers
- \circ Authored shell scripts for YAML-to-JSON configuration of key-value pairs reducing effort by 15%
- o Tools Used: React, Cypress, JavaScript/CSS, Shell

Projects

Workout Tracker

- Built a full-stack application with JWT-based authentication and RESTful APIs for workout management
- o Implemented custom **middleware** for user session handling and data validation to ensure secure data access
- Designed a responsive dashboard featuring workout tracking with graphical representations showing progress
- $\circ\,$ Tools Used: React, Node, MongoDb Atlas, Express, REST API's

Binary Bishop - Chess Engine

- Engineered a chess engine, implementing algorithms like Alpha-Beta pruning for efficient move evaluation
- Optimized engine performance using dynamic programming with *transposition tables* and *zobrist hashing* for **position caching**
- Designed an evaluation algorithm on piece and mobility values, positional tables, and space control factors
- o Tools Used: Python, python-chess

Discord Clone

- Developed a Discord clone featuring real-time messaging with WebSocket integration for instant updates
- Implemented comprehensive server/member management system with role-based access control
- Built advanced features including unique invite links, file sharing, and real-time message editing/deletion
- o Tools Used: NextJs, Prisma, Clerk, Tailwind CSS, ShadcnUI, MySQL

Password Manager

Mar 2022 - Apr 2022

- Developed a password manager to store, manage and encrypt passwords
- Implemented secure features including password generation and password sharing
- Stored the required information using MySQL and enabled two-factor authentication
- o Tools Used: MySQL, NodeJs, React, Express

Skills/ Technical Proficiency

Technologies/frameworks: React, Node.js, Next.js, Git, Cypress

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

Databases: MongoDB, MySQL

Position of Responsibilities

Gurjari Cultural Association, BITS Pilani

Sept 2022 - May 2024

President, Secretary

- Lead a team of 150+ members to organize 10+ events throughout the years
- Organized the biggest cultural event on campus with a footfall of 2000+ and generated 2 lakhs of revenue