Harsh Prajapati

Gandhinagar, Gujarat

Education

Dhirubhai Ambani Institute of Information and Communication Technology

Sep. 2020 - May 2024

Bachelor of Technology in Information and Communication Technology

Gandhinagar, Gujarat

Experience

Product Engineer Intern

Jan 2024 - May 2024

QBack.ai

Remote

- Utilized Next.js, AWS, MongoDB, and various NPM packages to develop a robust system for QBack.
- Designed and developed scalable backend and **AI services**, enabling seamless integration with multiple backend services to enhance AI-driven content generation.
- Collaborated closely with cross-functional teams to innovate product features and functionalities, playing a pivotal role as a founding engineer in shaping the product vision and strategy.
- Worked with large language models (LLMs) and implemented vector databases to improve the accuracy and efficiency of AI-generated content.
- Developed a Chrome extension using React to capture web information and enable communication between the platform and the extension.
- Fixed a bug in an NPM library that was being used in the code **Open source contribution.**

Summer Research Intern

May 2023 – July 2023

Team Project

DA-IICT, Gandhinagar, Gujarat

- Implemented the FTP (File Transfer Protocol) in Python to facilitate file transfer between client and server. Utilized FTP commands such as RETR (Retrieve), STOR (Store), LIST (List directory), and others to manage file operations.
- Incorporated **multi-threading** in the server-side application to enhance concurrent file transfers. Each client request spawns a separate thread, allowing multiple clients to upload or download files simultaneously.
- Adopted a **master-slave architecture** on the server side for efficient file sharing. The master server manages incoming client requests and distributes them to available slave threads for processing.
- Limited the number of sockets on the server to a predefined value to avoid overwhelming the server resources. Configured the system to efficiently handle a specific number of clients simultaneously.

Placement website Developer

June 2022 - February 2023

Volunteer - Front End Developer

DAIICT, Gandhinagar, Gujarat

- Developed the front end of a placement website using React and MUI.
- Integrated frontend with backend APIs for the admin panel and implemented user registration UI.

Projects

Url-shortner-service | Nodejs, Express, MongoDB, Redis

November 2022

- Created an backend API service where user can short the URL and get the unique short URL.
- Implemented **Redis** to reduce processing time for repeated short URL requests.
- Developed the UI using **React** to create a minimalistic interface that efficiently utilizes the API.

Price History Tracker | PostgreSQL, Nodejs, PG-Admin

Septmber 2022

- Designed a SQL database and APIs as a part of our course project.
- From problem statement we crafted SRS document, user requirements and ER diagram, database design, Database normalization and its implementation in Postgresql.

Technical Skills

Languages: C++, C, JavaScript, Typescript, Python, HTML5, CSS3, , SQL, NoSQL

Developer Tools: AWS-(S3, SES), GitHub, Apify-Scrapper, Vercel

Technologies/Frameworks: NextJS, ReactJS, NodeJs, Git, MongoDB, VectorDB PostgreSQL, LLMs

NPM packages: Langchain(JS), MUI, NextAuth, Mongoose

Leadership / Extracurricular

Microsoft Student Technical Club - MSTC

February 2021 - April 2023

Associate Core Member

DA-IICT

• Mentored 100+ students in web development through WOC - Annual Tech. Club Learning Program

Coding Rating & DSA practice

Solved 1000+ DSA questions across platforms

- Codeforces-Max 1321
- Leetcode-Max 1558