Shlok Zanwar

I am an enthusiastic, dedicated, and hardworking person, with a desire to learn and explore the ever-evolving technologies of computer science.

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Experience

ANSYS

Jan 2023 - Present

Commenced a role as a **Software Development Intern** for the Semiconductor Business Unit at Ansys, secured through campus placement. Utilizing my expertise in Python and C++, I am diligently working towards **debugging** and **creating robust code** to drive superior results.

Integrated active monitoring Pvt Ltd

Jan 2021 - Jan 2023

Software development Intern

React, Python, PostgreSQL

CMS Portal

- CMS is a real-time alert monitoring system that allows multiple operators to monitor remote locations for safety and security purposes.
- Spearheaded the modernization of the CMS platform by upgrading the frontend to React and the backend to FastAPI, resulting in significant improvements in performance and scalability.
- I **revamped the database schemas** by redesigning and **normalizing** them.
- I designed and Implemented a custom messaging protocol using WebSockets to handle alerts and events in real-time, significantly improving the responsiveness and effectiveness of the CMS platform.

RFID-based Inventory management

- Enhanced the performance of complex **PostgreSQL** queries that extracted data from approximately **500,000 rows**, resulting in a more than **120% reduction in query response** time.
- Constructed user-friendly dashboards and graphical visualizations to present millions of data points of inventory stock status in a simple and intuitive manner.

Images Dashboard

- Architected the frontend code-base of Images dashboard (CCTV image capture and audit platform), leveraging Redux and ReactJS routing to provide advanced state management and seamless user experiences.
- Created an **efficient algorithm** to access the metadata of **thousands** of images in **O(1) time complexity**.
- Created a streamlined Ticket Management module.
- Automated daily reports using ExcelJs, resulting in savings of more than 20 man-hours per day in manual report creation.

Skills

Data Structures and Algorithms ReactJS

Web Development C++ Python

Javascript Redux SQL

PostgreSQL Problem Solving

Teamwork NodeJS

Education

BTech Computer Science Engineering

Vishwakarma Institute of Information Technology (VIIT) CGPA - 9.79 06/2019 - 06/2023

Key Projects

Code Rooms 🔗

Sep 2021

- Architected and developed Code Rooms, a learning management system that enables teachers to create and manage classrooms, assignments, and assessments with ease.
- Integrated advanced features, including an automated test case system and an in-app PDF viewer, to provide a seamless and user-friendly experience.
- Successfully <u>deployed</u> and implemented Code Rooms, currently being <u>utilized</u> and favored by both teachers and students in VIIT.
- Built using a tech stack consisting of ReactJS,
 FastAPI, SQL, Antd, and Redux.

Shlok Zanwar Portfolio Website

- This web app serves as a playground for me to constantly experiment with and deploy new technologies and apps, expanding my skills and knowledge in the process.
- Some apps deployed are:-
 - Binary Tree Visualizations: These are UI's to visualize the insert, delete and search operations on Binary Search Tree / Heap.
 - **Pastebin**: A web application that allows users to upload and share text online.
 - TodoApp: A well-designed to-do application with features such as drag and drop, and task categorization.