# Suman Sekhar Sahoo

Bachelor of Engineering, BITS Pilani

https://www.linkedin.com/in/suman-sekhar-sahoo-82621623b/

https://github.com/sumansekharsahoo/

✓ f20212605@hyderabad.bits-pilani.ac.in

**(**+91) 8610203663

#### **EDUCATION**

# Birla Institute of Technology and Sciences Pilani, Hyderabad, India

Sep 2021 - May 2025

Computer Science Engineering (Major) | CG: 8.02

• Courses: Computer Programming, Object Oriented Programming, DBMS, Operating Systems, Theory of Computation, Machine Learning, Foundations of Data Science, Blockchain Technology

## **EXPERIENCE**

SmartCBS May 2023 - Aug 2023

Frontend Development Intern

Hyderabad, India

- Established connection with an API to fetch customer data in JSON format and used React's component-based architecture to display it.
- Used context API to manage API data in a single context provider avoiding prop drilling. Styled components using Tailwind CSS
- Technologies used: ReactJS, Context API, Tailwind CSS

## **PROJECTS**

## **Multithreaded Distributed Graph Database**

Oct 2023 - Nov 2023

Multithreading, Graph traversals, Operating System

BITS Hyd

- Simulated a Graph Database that involved Load balancer process, Primary server and 2 Secondary servers, a Cleanup process and several Client processes.
- Secondary server spawns threads to serve requests of clients. Used mutex locks to prevent simultaneous write and read or write and write.
- Implemented multithreaded graph traversal- BFS and DFS with semaphores.

#### Full stack website for BITS MHSG

July 2023 - Aug 2023

NextJS, GraphQL, Tailwind CSS, Hygraph, Auth

- Developed a responsive website for BITS Mental Health Support Group using NextJS, Tailwind CSS, GraphQL and Hygraph.
- Implemented Authentication using Firebase Google Auth provider. User can share playlists and post concerns regarding mental health to experts (Experts have admin page to address these issues)
- Users can choose to delete their data- comments, mental health queries, Auth details.

## Property rental agency database

Feb 2023 - Apr 2023

Oracle, PL-SQL

BITS Hyd

- LDesigned a EER model and relational schema pertaining to the requirements of the rental agency.
- Created tables with required keys and dependencies.
- Created procedures and triggers to provide functionality to the database.

## Skills

- Programming Language: C, C++, JavaScript, Java, SQL
- Foundational Concepts: OOPS, DBMS, OS, Software Engineering
- Skills:Frontend Development, Relational Database Management, Machine Learning
- Toolkits/Libraries: ReactJS, NextJS, Redux, Linux, Git, Docker, VSCode

## **Position of Responsibility**

## Website development team head - BITS Mental Health Support Group

Jun 2023 - Present

The website development team at BITS Mental Health Support Group aims at increasing the accessibility, reach, and impact of mental health resources. As the Website Team Head, I lead a team of young developers responsible for developing and maintaining our organization's website, ensuring its functionality, usability, and visual appeal.