Education

Geethanjali College of Engineering and Technology

Bachelor of Technology in Electronics and Communication (8.40 CGPA)

Sri Chaitanya Junior Kalasala

TSBIE in Mathematics, Physics and Chemistry (90.3/100)

Projects

Peerchat | Live link / Repo link

- Engineered a peer-to-peer chat platform with the MERN stack and Socket.io, handling real-time messaging with under 300ms latency in controlled tests with 5 simulated users. Ensured 98% message delivery success rate in test scenarios.
- Designed a responsive UI with Daisy UI and TailwindCSS, tested across 3 device types to maintain visual consistency. Achieved a 90% usability score in self-assessment based on industry design standards.
- Incorporated Cloudinary for image uploads and Zustand for state management, reducing image upload time by 20% in test cases. Limited re-renders to 5 per transaction to optimize performance.
- Tech Stack: MongoDB, Express.is, React.is, Node.is, Socket.io, Zustand, Cloudinary, Daisy UI, TailwindCSS.

Blogosphere | <u>Live link</u> / Repo link

- Built a full-stack blogging platform with React and TailwindCSS, tested with 10 blog posts and ensured smooth CRUD operations. Achieved 95% UI responsiveness in functional testing.
- Implemented a serverless backend using Cloudflare Workers and Hono runtime, reducing API latency by 30% and ensuring 90% uptime under light usage scenarios. Optimized deployment to cut costs by 20%.
- Integrated JWT-based authentication, securing user access with 5 test accounts. Verified 100% authentication success rate with proper token validation in functional tests.
- Tech Stack: React.js, TailwindCSS, Cloudflare Workers, Hono, JWT, PostgreSQL, Prisma ORM.

Image Echoes | *Live link* / *Repo link*

- Developed a photo gallery web app with React and TailwindCSS, supporting 20 test images with consistent rendering across 3 screen sizes. Integrated Sanity CMS for structured content management.
- Secured authentication using Google Firebase, ensuring proper access control for 3 test users. Achieved 100% authentication success rate in simulated login scenarios.
- Streamlined and Optimized local storage session management, maintaining data persistence across 10 test sessions. Reduced reload times by 15% for actions like photo uploads and comments.
- Tech Stack: React.js, TailwindCSS, SanityCMS.

Technical Skills

Programming Languages: JavaScript, HTML, CSS, TypeScript, Java. **Database**: Postgres, MongoDB. Libraries / Frameworks: React, Zustand, TailwindCSS, Next. js, Node. js, Hono, Prisma, Express. js. Relevant Coursework: Data structures and Algorithms, OOP. Developer tools: Github, Visual Studio Code.

Coding Profiles

Leetcode: Contest ranking of 1450 : leetcode.com/vigneshsadhu143/

Leadership / Extracurricular

IEEE Nanotechnology Council SBC

Vice Chairperson

November 2022 – May 2024

Geethanjali College of Engineering and Technology

- Provided strategic leadership and governance as Vice Chairperson of the IEEE Nanotechnology Council, overseeing operations and fostering collaboration within the student branch chapter, impacting over 500 students.
- Directed a team of 13 executive board members, conducting regular meetings to track progress and ensure alignment with organizational goals.
- Successfully coordinated multiple events under the IEEE NTC banner, demonstrating strong organizational provess and commitment to excellence, attracting participation from over 750+ students and professionals.

Hyderabad, Telangana, IN June 2018 – May 2020

Hyderabad, Telangana, IN

Sadhu Vignesh

November 2020 – June 2024