Kush Thaker

https://www.thakerkush.com

Email: thakerkush12@gmail.com Mobile: +91 8879891903

EDUCATION

NMIMS (Mukesh Patel School of Engineering)

Mumbai

B. Tech Integrated – Electronics and Telecommunications CGPA:3.51/4

2019 - 2025

PROJECTS

• Node.js Express Chat Backend :

Node.js + Express

- A group chat backend service built with Node.js, Express and Websockets.
- Uses WebSockets to handle real-time communication.
- Allows users to view messages, join and leave chat channels via the REST endpoints.
- Express handles REST APIs for user and channel CRUD, joining and leaving channels
- REST APIs to view message history and channel info
- Separate micro-service to a synchronously persist messages to a Postgress Database $\,$
- <u>Tools Used</u> Redis Streams, Docker, <u>@slonik/migrator</u> (to handle migrations)

 \circ <u>Sientia</u>: Node.js + Express

- A learning platform backend service built with Node.js, Express, and Sequelize.
 - Allows users to ask their doubts and helps understand content by creating quizzes and content summary via the REST endpoints.
 - Express handles REST APIs for user CRUD, task creation, and quiz generation and also retrieve task and quiz information.
 - Separate micro-service for using the AI model for content and quiz generation also implements a quiz evaluation mechanism
 - Uses PostgresSQL as the Database.

• Plant health detection system:

Python

- Created a system that uses NDVI to determine plant health, the system uses multiple sensors like temperature, humidity, soil moisture along with NDVI to determine overall plant health.
- Used open cv to increase the contrast of the captured image using contrast stretching method, applied the NDVI formula to the high contrast image and then applied a color map to get a better visualization of the index.

PROGRAMMING SKILLS

• Languages: Python, JavaScript, SQL (Postgress), Go

Technologies: Django, Express, JavaScript, Typescript, Redis, Terraform, Azure, AWS PostgreSQL, WebSockets, Docker, Git, Raspberry Pi, Arduino