

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 asynchronously persist messages to a Postgress Database
 - *Tools Used* - Redis Streams, Docker, [@slonik/migrator](#) (to handle migrations)

- **Django E-commerce Backed (In progress 🚧)**: Django
 - Designed an E-commerce backend system
 - Uses PostgreSQL as the Database
 - Redis for async tasks queues
 - Elasticsearch to power a fuzzy search
 - Implemented Authentication and Authorized routes using token authentication In Django
 - Dockerized the entire application for reproducible deployments
 - Implemented async task queues to sync elasticsearch
 - Next Steps
 - Caching
 - Checkout flow

- **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)
- Technologies:** Django, Express, JavaScript, Typescript, Redis, PostgreSQL, WebSockets, Docker, Git, Raspberry Pi, Arduino