

Satwik Agarwal



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SKILLS

ReactJS

NextJS

Python

Firebase

Javascript

C/C++

Embedded Systems

STM32

EDUCATION

B.Tech. , CSE

Manipal Institute of Technology, Manipal

2021 - 2025

CPGA : 8.9

CBSE 12th

Welham Boys' School , Dehradun

2019 - 2021

Grade : 99%

WORK EXPERIENCE

Avionics Engineer

ThrustMIT, Manipal [↗](#)

08/2021 - Present

ThrustMIT is India's top Student Rocketry Team

worked on:

- the Rocket Flight Computer, a Realtime Data-Plotter and Simulation, Rocket Motor Ignition Systems.

PROJECTS

Reddit Clone

- A reddit clone with user authentication, community posts creation, and comments
- Tech Stack: **NextJS**, **ReactJS**, **Firebase**, **TailwindCss**
- Visit: <https://reddit-clone-kappa-kohl.vercel.app/>
- Code: <https://github.com/asatwik218/Reddit-Clone>

Portfolio Website

- My portfolio website inspired by Instagram's UI featuring all my projects , about and contact page
- Tech Stack: **NextJS** , **ReactJS** , **Firebase** , **TailwindCss**
- Visit : <https://satwik-agarwal.vercel.app/> [↗](#)
- Code: <https://github.com/asatwik218/Satwiks-Portfolio>

Realtime Data Plotter

- Thrustmit Plotter is a powerful data visualization tool designed to display real-time graphs and maps for Thrustmit's sounding rocket
- The application incorporates GPS coordinates to provide a live map that accurately displays the rocket's current location
- Tech Stack: **Plotly** , **Python** , **Dash** , **Py-serial**
- Code: <https://github.com/asatwik218/Plotter-Dash>

STM32 based Flight Computer

- Wrote firmware for custom stm32 based flight computer responsible for apogee detection, data acquisition and telemetry
- Custom drivers for sensors using I2C, SPI
- Implemented ADC, Interrupt Handling and DMA
- Tech: **STM32F4 microcontroller**, **Embedded C**, **Stm32cubeIDE**
- Code: <https://github.com/asatwik218/STM32-projects>