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NIKHIL MISHRA

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Hyderabad, India

SUMMARY

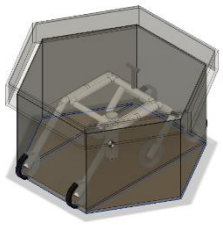
A self-motivated, hardworking 3rd Year B. Tech student in Electronics and Communications Engineering with knowledge in embedded systems and skills in MATLAB, Multisim, Arduino, Fusion360 CAD and deeply passionate about things that defy gravity. Seeking an internship for 2020.

EDUCATION

Program	Institution	CGPA	Year
B. Tech, Electronics & Communications Engineering	St. Martins Engineering College	73%	2017 – 2021
XII (Senior Secondary)	Sadhu Vaswani International School, CBSE	71%	2015 - 2017
X (Secondary)	VJPS, CBSE	9.8	2015

PROJECTS

Balloon-Sat – Venus Exploration Mission (In Progress)



Objective: To design/test an exploration mission to Venus with a lander and rover.

- Designed the mission plan.
- Designing radio systems for long range communication.
- Designing a battery management system for rover.
- Designing the Parachute Ejection System.
- Designing Lander Descent Program.

Rocket Motor Test Bench

Objective: To design a thrust bench to test rocket motors

- Designed a High Load Switch using a MOSFET.
- Designed a free running – counter program.
- Designed a Class C solid rocket motor.
- Conducted rocket motor burn tests.

TEJAS – Rocket Flight Computer

Objective: To design a flight computer for launch vehicle for telemetry and apogee detection.

- Designed a Thrust Vector Controlled Mount for rocket motor.
- Conducted tests for barometric sensor using Kalman Filter
- Designing the flight computer architecture. – fault tolerant
- Designed an Apogee detection algorithm.
- Simulated flight trajectory.

Personal Assistant for Everyday Devices

Objective: To design a personal assistant for everyday devices.

- Designed activity diagram for assistant
- Deploy Google Assistant SDK in Raspberry Pi 3B+
- Tested the latency and for errors in voice detection
- Embedded using Raspberry Pi and Arduino

TECHNICAL SKILLS

- Python
- C
- C++
- MATLAB
- NI Multisum
- Arduino
- I2C, SPI
- Autodesk Fusion 360 (CAD)
- PCB designing

TRAINING & CERTIFICAITONS

- Completed a Verzeo Machine Learning Internship
- Competed a 48-hour NASA's International Space Apps Challenge
- Attended a 2 – Day BITS ATMOS Machine Learning Workshop
- Attended a 1 – Day Machine Learning Workshop - TAM
- Done a 4 Week Python Data Science Course from Udemy

ADDITIONAL DETAILS

- Participated in National Level Project Expo – TECHNOVATION – 2018
- Awarded "Best Student" in 12th Class.
- Hobbies include astronomy, reading scifi novels and basketball.
- Passionate about space and things that defy gravity.