APOORV GARG

apoorvgarg.21@gmail.com
https://github.com/Apoorvgarg-creator
https://www.linkedin.com/in/apoorv-garg-371838143

PROFILE

Detail-oriented IT student with 2 years experience as a software support specialist and systems/network technician. Skilled at operating in a wide range of platforms. Excellent written and oral communication skills; capable of explaining complex software issues in easy-to-understand terms.

WORK HISTORY

Cansat, Team Kalpana — August 2019 - August 2020

Designation - Ground Control Station crew

- **Cansat** is an international competition organised by **American Astronautical Society (AAS)** where a group of 10 students design-build-launch competition for space-related topics.
- Role: designed and developed a fully-functioned **GUI**(graphical user interface) through **Labview** and **Python's Folium.**

UAV, Team Kalpana — August 2020 - December 2020

Designation - Ground Control Station crew

- **UAV challenge** by **Australian Association for Unmanned Systems (AAUS)** is an international competition where the students are required to build a **UAV(unmanned aerial vehicle)** which must follow the tasks given in their guidelines.
- Role: To design a **communication model** for our UAV with the ground station, design a structure to read, analyse and send the packets to the GUI.

Research, Space Development Nexus (SDNx) — November 2020 - March 2021

Designation - Intern

- **SDNx** is a revolutionary platform to Educate, Inspire and Connect all the precious of the planet earth.
- Role: To design and research the Attitude and control(**ADC)** system of a nanosatellite. To discover the orbits that meets the requirement of the project.

EDUCATION

1. Silver line prestige school – Senior Secondary, 2019
   - Scored 95.6% aggregate in CBSE board exams
2. Netaji Subhas university of technology – B.tech(IT), 2023
   - Scored 8.56 cgpa aggregate till semester 3

SKILLS

Machine learning, Data structure, Deep learning, Data analytics, GUI builder and Time Management

Python, Java, HTML, Javascript, CSS, React, Node.js *(express, sequelize, socket.io)* , MongoDB, SQL and C++

Others : Git/Github, Incremental learning(creme), hashcat, Labview, Database Management and Microsoft office

PROJECTS

- **Desktop App "Cansat":** *Labview, Python, VISA (Serial read)*
  - Features -> It would read the payload telemetry and read the data and will accordingly plot it on graphs, barometer(pressure), thermometer(Temperature) and plot a 3d trajectory of the payload on a 3d graph plot.
- **AI Image caption bot:** *Image processing, Transfer Learning, Tensorflow, Flask, ResNet50*
  - Features -> ResNet50 Architecture was used to train the model. Caption_generator function was built to generate a caption when an image was uploaded on the website.
- **Covid detection using X-Ray:** *CNN Model, Matplotlib, pandas, PCA (Principal component analysis)*
  - Features -> Generator was used to handle the large dataset and used a CNN-based model to detect covid through X-ray.
- **E-Drone(e-yantra) :** *ROS, Dijikstra Algorithm(Path planning), Object detection(OpenCV), simulation(Gazebo)*
  - Features -> Designed the path planning algorithm and object detection technique of the e-drone through ROS and python and were tested in Gazebo.

AWARDS

- Team "Gagan#5160" participated in Cansat 2020 and bagged **10th rank** worldwide.
- Won the **8th position** in Technovation events of Tryst IIT Delhi 2018.