Applications learned:

Mapsource

QGIS

Folium library - python

pyQT5(introductory)

flightgear-python library(introductory)

Activities:

Path plotting for UAV

Updating UAV log book

Plotting telemetry data using matplotlib, mapsource and QGIS

Hexacopter flying and general maintenance

Volunteering at ICORT 2025(5th to 8th March)

GATE exam prep and attempt (1 Feb)

Reading research papers

Literature review:

Use of fuzzy logic to design a PID controller for UAV control.

Use of reinforcement learning to design a UAV flight controller

Failure mode analysis use Monte Carlo methods for both target and missile

Modeling IR signature of aircrafts

Shift in frequency of IR waves due to scattering, absorption and re-emission in medium and doppler effect

Methods of reducing aircraft IR signature