ANKIT SINGH

Delhi, IN| P: +91 9711588886| anki.002singh@gmail.com |LinkedIn | GitHub

WORK EXPERIENCE

SIMULATIONS LAB Nov 2023 - Jan 2024

Research Intern

- Carried out a project titled "Feature on Wing Flap to Enhance Aerodynamic Efficiency"
- Performed CFD analysis to study the airflow over a moderately swept backward wing
- Calculated the efficiency of the wing at different angles of attack at different airstream velocities and different AOAs of the flaps on the wing model
- Technology: Ansys Fluent
- Results: According to the graphs plotted, the most efficient design was produced.

SPARTIFICIAL PVT. LTD. May 2023 - July 2023

Trainee Intern

- Worked as a trainee and completed the training course on "Astronomical data analysis using Python"
- Technology: Python

OMSPACE PVT. LTD. Nov 2022- Dec 2022

Research Intern

- Performed 4 research tasks on space launch vehicles of India and different types of propulsion systems

TEACHNOOK Sep 2022 - Oct 2022

Research Intern

- Performed research on "Use of Nanotechnology in Aerospace Industry"

UNIVERSITY PROJECTS

ORNITHOPTER Apr 2023 - Present

- Developed a biomimetic flapping mechanism of red-tailed hawk with project title "Red tailed Hawk inspired Ornithopter"
- Technology: Fusion360 for CAD designing
- Role: Team Leader
- Results: (The project is still going on)

DRONE-BASED ROAD MAPPING AND CONDITION MONITORING SYSTEM Nov 2023 - May 2024

- Coordinated with a cross-functional team of 9 to develop an advanced drone-based system, improving road survey efficiency by 40% and providing critical data for infrastructure planning and maintenance
- Developed a CAD Design of the drone integrated with camera and sensors along with a animation to visualize the monitoring task of the drone
- Technology: Fusion360, Blender
- Role: Team Member

1U CUBESAT Jun 2023 - Jul 2023

- Designed a 1U CubeSat with humidity and temperature sensor
- Three simulations were done: Stress Load Simulation (100 and 500 N), Thermal load simulation and Modal Frequency simulation
- For temperature and humidity, DHT11 sensor was used and as for gyroscope and accelerometer, MPU6050 was used
- Technology: Fusion360 for CAD designing
- Results: A 3D printed cubesat was manufactured with observing proper functioning of the sensors.

EDUCATION

VIT BHOPAL UNIVERSITY June 2021 - Present

Bachelor of Technology
Aerospace Engineering
CGPA: 7.65
Relevant Coursework: Mechanics of material, Aerospace Structures, Aeroelasticity, Fluid Dynamics, Space Flight Mechanics, Guidance & Navigation control, Rocket Propulsion, Aerospace Vehicle Design, Experimental Aerodynamics, Thermodynamics, Thermal & Heat transfer

GRAND COLUMBUS INTERNATIONAL SCHOOL May 2020 - July 2021

XII
Percentage: 90%

SANT NIRANKARI PUBLIC SCHOOL May 2020 - July 2021
X
Percentage: 88%

SKILLS

Languages: Java, Python
Technologies & Tools: Fusion360, Ansys, Solidworks

ADDITIONAL

Languages: Fluent in English and Hindi
Certifications: Introduction to Self-Driving Cars (Coursera), Better use of AI tools Be10x)
Achievements: AIR 4 in Phase 1 of AeroTHON 2024 (Member of Team Aerial Eyes)
Participations: eTAE-23 (National Seminar on Emerging Technologies in Aerospace Engineering, IIT Bombay), Online training program on "Overview of Space Science and Technology" (ISRO), One Week industrial visits in an internship program (Aero Innovation and Skill Center, Bangalore), STAR Dream Payload Challenge 2022 (Space Technology and Rocketry, Gujarat), College cricket tournaments
Hobbies: Playing cricket, Watching movies