DEPARTMENT OF AEROSPACE ENGINEERING

Defence Institute of Advanced Technology (DU)
Girinagar, Pune - 411025, INDIA

Dr. Hari Om Verma

Ph.D. (IIT Kharagpur)

Assistant Professor, Department of Aerospace Engineering

5 Years Experience in Teaching & Research

Research Areas

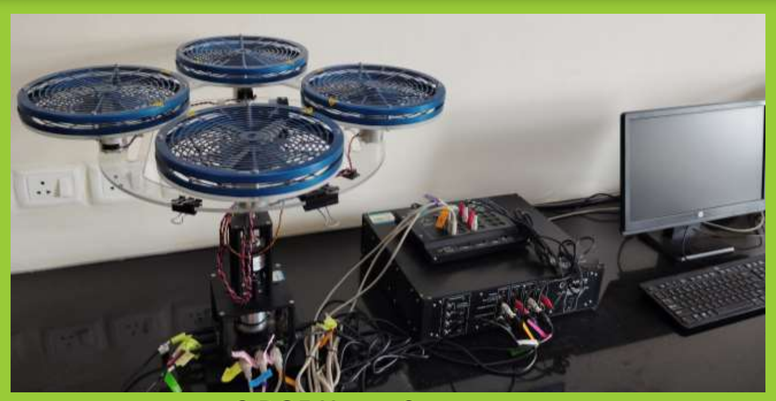
1. Aircraft System Identification and Parameter Estimation
2. Flight Dynamics and Control of Aircraft
3. Path Planning of UAVs/MAVs

Awards

- Ministry of Education (MHRD) Fellowship for MTech and PhD Programs.
- Best Poster Presentation Award on Research Scholar Day.

Publications (Total)	Journals	Conferences	Invited Talks
14	6	8	2

Facilities Developed



3 DOF Hover System

Research Highlights

- Estimation of Aerodynamic Parameters of aircraft at moderate and high angle of attack regime.
- Attitude Controller Design of Aircraft/Missile/UAVs using Linear and Nonlinear Control Theory.

Professional Membership

- LIFE MEMBER Aeronautical Society of India (AeSI)

Peer Reviewed Journal Publications (selective Five)

1. *H. O. Verma and N. K. Peyada, "Estimation of longitudinal aerodynamic parameters using recurrent neural network", The Aeronautical Journal, Vol. 127, No. 1308, pp. 255-267, 2023*

2. *H. O. Verma and N. K. Peyada, "Estimation of aerodynamic parameters near stall using maximum likelihood and extreme learning machine-based methods", The Aeronautical Journal, Vol. 125, No. 1285, pp. 489-509, 2021.*

3. *H. O. Verma and N. K. Peyada, "Aircraft parameter estimation using ELM network", Aircraft Engineering and Aerospace Technology, Vol. 92, No. 6, pp. 895-907, 2020.*

4. *H. O. Verma and N. K. Peyada, "Parameter estimation of aircraft using extreme learning machine and Gauss-Newton algorithm", The Aeronautical Journal, Vol. 124, No. 1272, pp. 271-295, 2020.*

5. *H. O. Verma and N. K. Peyada, "Parameter estimation of unstable aircraft using extreme learning machine", Defense Science Journal, Vol. 67, No. 6, pp. 603-611, 2017.*