

Autonomous Indoor Navigation Systems for Drones using Ultrasonic Frequency



INDRAPRASTHA INSTITUTE *of*
INFORMATION TECHNOLOGY
DELHI

Prashasti

Chanakya Doctoral Fellow

Guide: Dr Anuj Grover

Dr Shouri Chatterjee



- Idea

- Scope



- Use Case

- Evidence



Business Proposal



- Commercial Viability
- Market Research



Bill of Materials



Development Plan



Description of Development Activities/Task/Milestones	Y1 Q1	Y1 Q2	Y1 Q3	Y1 Q4	Y2 Q1	Y2 Q2	Y2 Q3	Y2 Q4	Y3 Q1	Y3 Q2	Y3 Q3	Y3 Q4	Y4 Q1	Y4 Q2	Y4 Q3	Y4 Q4
Project: Development of Acoustic Sensor for localization of objects by measuring distance, velocity , angular distance, Resolution using PWM Chirp signal.																
Delivery Phase 1: Feasibility Study, Design, Implementation, Demonstration at IIITD-IITD Lab and Field Trials at iHub Campus																
Feasibility Study & Architecture Design																
PMU Specific Research																
Hardware Design and Implementation																
Software Design and Implementation																
System Integration with 5G Private Network Connectivity																
Demonstration at IITD Labs																
Demonstration and Field Trials at THDC																

**Currently
ongoing**

- Simulation Exercise for Transmitter and Receiver is currently being done.
- Demo is planned