

Overview

- Traditional Quadcopters have low range, endurance and speed as they have almost no aerodynamic system. We wanted a design that had the benefits of both a plane and a Quadcopter to make fast, reliable and robust delivery system.
- Our Primary focus is to improve Endurance and Range - an important characteristic for UAV market. Making it suitable for various industries
- Autonomous Systems are not fully reliable at the moment and also lack high speed obstacle avoidance and complex end of trip path planning required in delivery applications.

Background and Research Gap

- UAVs are being widely used for various applications today including deliveries and supplies and remote surveillance.
- Most of the UAVs have a flight time of 20 minutes.
- Most of the UAVs can't achieve high speeds due to aerodynamic limitations.