

# Background and Research Gap

- There is no thorough research on the applicability of a dual axis tilt rotor for UAV till date.
- Swarm based UAVs and Drone-to-Drone communication has been explored to a very limited extent.
- Very limited research exists on the applicability of high speed autonomous systems in complex environment.

# Challenges

- Endurance and Range
- Precise Manoeuvres and Stability
- High Speed Obstacle Avoidance
- Real-Time Connectivity
- On-Board Intelligence
- Fault Tolerance of Autonomous Systems