Autonomous Drone Delivery System - Project Brief

Our logistics company requires an autonomous drone system for last-mile package delivery in urban areas. The drones must navigate using GPS and computer vision, avoid obstacles in real-time, and deliver packages weighing up to 5kg within a 10km radius.

Safety requirements include emergency landing protocols, geo-fencing to restricted areas, and real-time monitoring dashboard. The system needs to handle 50 simultaneous drone operations.

Technical requirements: Python-based backend, ROS (Robot Operating System) for drone control, AWS cloud infrastructure for data processing. We have a $50,000 budget and 8-month timeline. Deliverables include prototype drones, control software, and operator training program.