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## Solving the Challenges of Autonomous Drone Delivery

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### **Solving the Challenges of Autonomous Drone Delivery**

Drones are small unmanned aerial vehicles that are an inevitable evolution of the parcel delivery industry because of their benefits for last-mile and long-distance deliveries. For example, drones can significantly improve delivery infrastructures by improving delivery times and safely servicing remote regions with life-saving supplies. However, widespread adoption of drones depends on addressing key challenges with the technology, including limited battery lives, long recharge times, and safe, autonomous operation in dynamic environments like urban centers. My research uses a coordinated network of autonomous drones to overcome these limitations. Deliveries are completed using a relay-based approach where drones hand off the package at stopover sites, recharge, and head back. Intelligent scheduling enables deliveries that are not possible for a single drone to complete and ensures efficient use of drone resources. This proposed system serves as a framework for smart drone delivery infrastructures.