

Agriwing: Advanced UAV for Pesticides Spraying

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Abstract: *Agriculture is a critical sector that sustains the global population, but it faces significant challenges such as pest infestations, labor shortages, inefficient resource utilization, and environmental degradation. This project focuses on the design, development, and implementation of a fixed-wing drone equipped for autonomous pesticide spraying and real-time video recording. Fixed-wing drones are particularly suitable for large-scale agriculture due to their ability to cover extensive areas rapidly and efficiently. This project not only aligns with the growing demand for precision farming but also contributes to global efforts in sustainable agriculture. By leveraging the potential of fixed-wing drones, the project seeks to empower farmers with advanced technology, improve productivity, and ensure environmental stewardship, paving the way for smarter and more sustainable agricultural practices.*

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