

AI-Driven Drone Flight Route Planning for Insurance Optimisation

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Abstract : This paper presents a framework for integrating artificial intelligence (AI/ML) into the underwriting and risk management process for drone insurance. By combining AI-powered flight path/route optimisation, real-time weather data, airspace analytics, and pilot recommendations, we propose a method for dynamically assessing the risk profile of drone flights scheduled. This system can be deployed via a mobile or web application, enabling real-time decision-making for both insurance providers and drone operators using drones for commercial or recreational purposes. The proposed model has the potential to enhance operational efficiency, safety, and the overall quality of insurance products for drones.

Keywords : AI, insurance, drones, ML, aerospace

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