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# 臺灣大學應用力學研究所演講 講公告

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講 題:AI Wings: AI 無人機之現況與展望

摘 要: 如附件

主 持 人: 李尉彰副教授

時 間: 113年09月16日(星期一)下午2時20分開始

地 點:臺灣大學應用力學研究所國際會議廳

## AI Wings: AI 無人機之現況與展望

#### 賴冠廷副教授

#### 摘要

近年來無人飛行載具(Unmanned Aerial Vehicles, UAVs)的技術日新月異,各種創新應用層出不窮。特別是在烏俄戰爭中,低成本且靈活的無人機取代了部分傳統武器,對大型軍事裝備如坦克和戰艦造成了重大的損害,徹底改變了傳統的戰爭方式。因此,全球各國紛紛投入大量資源,加速發展自主無人機技術,以期能搶佔先機。

此次講演將深入介紹當前主流的開源無人機技術,以及無人機在各個領域的創新應用。此外,我們將介紹台灣無人機國家隊的發展現況,並分享本實驗室開發的AI Wings 的AIoT之無人機控制系統。希望透過這次講演,能為聽眾提供對無人機技術更為全面的視角,並促進對未來相關產業發展的深入思考。

### **AI Wings: The Current State and Future Prospects of AI Drones**

In recent years, Unmanned Aerial Vehicles (UAVs) have seen rapid advancements, leading to a wide range of innovative applications. Notably, the Ukraine-Russia war shows that low-cost and agile drones have replaced traditional weapons and made significant damage to large military machines such as tanks and warships. As a result, countries around the world are investing heavily in drone technologies to gain a strategic edge.

This lecture will provide an in-depth overview of mainstream open-source drone technologies, as well as the innovative applications of drones across various sectors. Additionally, we will introduce the status of Taiwan's drone development and share insights into our lab's AI Wings, an open-source AIoT-based drone control system. Through this lecture, we aim to offer the audience a comprehensive understanding of drone technologies and insights on the future development of related industries.