



Department of
Mechanical Engineering
The University of Hong Kong



SEMINAR

Correlation Filter- and Siamese Network-Based Visual Object Tracking for UAVs

- Date:** 29 March, 2023 (Wednesday)
Time: 10:30 a.m.
Venue: Room 7-34, Haking Wong Building, HKU
- Speaker:** Mr. Fuling Lin (PhD candidate)
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Abstract:

Recently, the rapid advancement of computer vision technology has substantially broadened the application scenarios of unmanned aerial vehicles (UAVs) and become an essential prerequisite for UAVs to perform autonomous perception and decision-making. As one of the most important research directions in the field of UAVs, UAV visual object tracking has received considerable attention. Although correlation filter- and Siamese network-based methods have made significant progress, the complex changes in the object appearance and environmental information pose many challenges for object tracking in aerial scenarios. To exploit the advantages of the two prevalent paradigms, an aberrance-aware UAV object tracking method was proposed, which has the online update ability and an efficient aberrance perception strategy, to achieve accurate and robust tracking in complex aerial scenes. Comprehensive and extensive experiments demonstrate that the proposed tracker can achieve competitive performance with a real-time tracking speed.

ALL INTERESTED ARE WELCOME

For further information, please contact Dr. P. Lu at 3910 2548.