

# The 1st Research Workshop of the Research Centre for Unmanned Autonomous Systems (RCUAS)

June 24th, 2025

TU201, PolyU & Zoom

Meeting ID: 813 1865 2116  
Passcode: 169774

The Unmanned Autonomous Systems Academic Workshop aims to promote communication, cooperation, and knowledge exchange among young scholars in the field of autonomous systems. Renowned scholars and budding academics will be invited to deliver presentations on a wide range of topics including perception, localization, navigation, mapping, state estimation, planning and control, multi-robot systems, and trustworthy AI. The workshop will include presentations highlighting diverse perspectives and innovative approaches in these areas.

## Speakers



**Prof. Chaoqun WANG**  
(*Shandong University*)



**Prof. Jin WU**  
(*University of Science  
and Technology Beijing*)



**Prof. Yi ZHOU**  
(*Hunan University*)



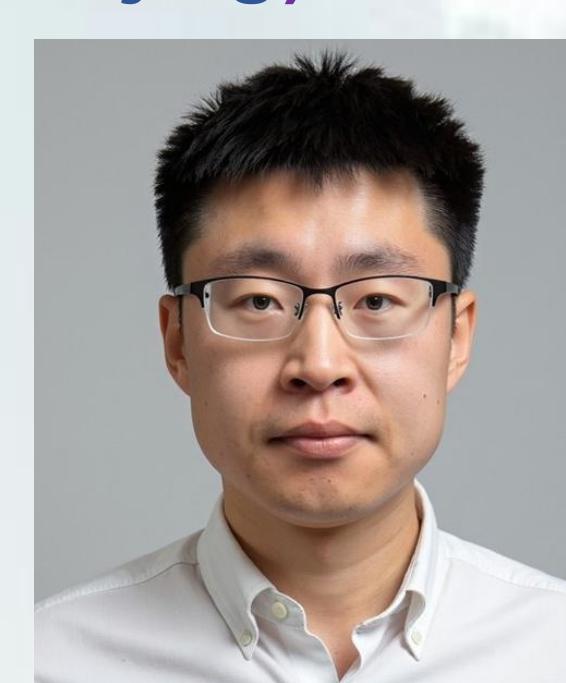
**Prof. Hailong HUANG**  
(*The Hong Kong  
Polytechnic University*)



**Prof. Bing WANG**  
(*The Hong Kong  
Polytechnic University*)



**Dr Xiangyu CHU**  
(*The Chinese University  
of Hong Kong*)



**Dr Boyang LI**  
(*The University of  
Newcastle*)



**Dr Tim PFEIFER**  
(*Siemens AG*)



**Dr Wenbo HU**  
(*The Hong Kong  
Polytechnic University*)

**Morning Session: 09:00-12:30, Afternoon Session: 14:40-17:45**

Time	Speaker/ Moderator	Activity/Presentation Title
09:00-09:10	Prof. Chih-Yung WEN	Opening Remarks
09:10-09:40	Prof. Yi ZHOU	Enabling Safer and Faster Mobile Robots with Neuromorphic Event-based Vision
09:40-10:10	Prof. Bing WANG	Towards the Age of Ocean Spatial Intelligence: Multi-Modal Underwater Scene Modeling
10:10-10:40	Mr Yin Yuen CHAN (on behalf of Prof. Kam Hung NG)	UAV-based Inspection of Aircraft with Deep Learning-based Visual Inspection System
10:40-11:00		Coffee Break
11:00-11:30	Prof. Hailong HUANG	Fast and Safe Flight of Autonomous UAVs in Complex Environments
11:30-12:00	Dr Boyang LI	UAS in Teaching and Research at the University of Newcastle, Australia
12:00-12:30	Prof. Weisong WEN	Open Discussion: Recent Advancement and Future Perspective of UAS
12:45-14:30		Lunch at Ju Yin House Seafood Restaurant, 4/F, Communal Building
14:40-15:10	Dr Wenbo HU (on behalf of Prof. You DONG)	AI-assisted UAV System for Bridge Defect Detection and Digital Perception
15:10-15:40	Prof. Chaoqun WANG	Embodied Perception and Navigation
15:40-16:10	Dr Xiangyu CHU	Embodied Agility for Autonomous Systems via Morphological Design and Motor Intelligence
16:10-16:30		Coffee Break
16:30-17:00	Dr Tim PFEIFER	Industrial Indoor Localization – Challenges and Trends
17:00-17:30	Prof. Jin WU	Open Discussion: Trustworthy AI and Autonomous Systems
17:30-17:45	Prof. Weisong WEN	Closing Statements

## Organizers

**Prof. Weisong WEN**  
(*Assistant Professor,  
Department of Aeronautical  
and Aviation Engineering  
The Hong Kong Polytechnic  
University*)



**Prof. Chih-Yung WEN**  
(*Director of RCUAS,  
Head and Chair Professor of  
Aeronautical Engineering of the  
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- Mr Xikun LIU, AAE, xi-kun.liu@connect.polyu.hk