Wang Xinyi Spring 2024

# Wang Xinyi

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# Education

 Postdoctoral Fellow, Hong Kong Centre For Logistics Robotics, Department of Mechanical & Automation Engineering, The Chinese University of Hong Kong
 10/2023-Now

• Ph.D. Degree, Department of Mechanical & Automation Engineering,

The Chinese University of Hong Kong

08/2019-09/2023

**Supervisor & Co-supervisor:** Prof. Ben M. Chen (IEEE Fellow & Academy of Engineering Fellow, Singapore) & Prof. Jie Huang (IFAC Fellow & IEEE Fellow)

B.Eng. Degree, Flight Vehicle Design and Engineering, Xiamen University

CDA 01.8/100 (D. 15. 185 4.646)

09/2015-06/2019

**GPA:** 91.8/100 (Ranking 1<sup>st</sup> out of 46) **Visiting student,** University of Oxford

02/2017

• **IELTS:** 6.5 (R6.5, L6.5, S6.0, W6.0)

02/2018

## Research Interests

Multi-agent coordination system, optimization and control theory

## **Publications**

#### Journals & conference

- [1] X. Wang, J. Xu, C. Gao, Y. Chen, J. Zhang, C. Wang and B. M. Chen, Sensor-based multi-agent coverage control with spatial separation in unstructured environments. 2024 IEEE ICRA, Yokohama, Japan, 2024.
- [2] **X. Wang**, Y. Ding, Y. Chen, R. Han, L. Xi, B. M. Chen. OA-ECBVC: A Cooperative collision-free encirclement and capture approach in cluttered Environments. IEEE CDC, 2023.
- [3] Y. Chen, R. Wang, X. Wang, B. M. Chen. Sampling-based path planning under temporal logic constraints with real-time adaptation. IEEE ICRA, 2023.
- [4] **X. Wang**, L. Xi, Y. Ding, B. M. Chen. Distributed encirclement and capture of multiple pursuers with collision avoidance. IEEE TIE, 2023.
- [5] Y. Chen, **X. Wang**, R. Wang, Z. Guo, S. Lai, B. M. Chen. An interactive system for multiple-task linear temporal logic path planning. IEEE IROS, 2023.
- [6] X. Wang, C. Gao, X. Chen, B. M. Chen. Fast and secure distributed multi-agent coverage control with an application to infrastructure inspection and reconstruction. CCC, 2023, Guan Zhao-Zhi Award Finalist.

## Technical Skills

Experienced in C/C++, Python, MATLAB, LaTex, Git, Gazebo

# Courses Experience

- ENGG 5501 Foundations of Optimization, instructed by Professor Anthony Man-Cho So.
- MAEG5403 Linear System Theory & Design by Professor Ben M. Chen

#### Awards & Honors

Postdoctoral Scholarship, the Innovation and Technology Fund of Hong Kong Professor Charles K. Ko Student Creativity Award, CUHK

10/2023-Now

06/2023

Wang Xinyi

Research Postgraduate Studentship, CUHK

2019-2023

Outstanding Graduates, XMU (Top 2%)

Merit Student, XMU (Twice, Top 8%)

Xiamen International Bank Scholarship, XMU (Top 4%)

Spring 2024

2019-2023

1 2/2016&12/2017

# Academic Services

## • Reviewer of Journals

- IEEE Transactions on Automatic Control (TAC)
- IEEE Transactions on Cybernetics
- International Journal of Robust and Nonlinear Control

#### Presentations

- ICRA 2023, London, England, poster presentation
- CDC 2023, Singapore, oral presentation
- CCC 2023, Tianjing, China, present for Guan Zhao-Zhi Award
- ICRA 2024, Yokohama, Japan, oral presentation