# DINGHAN WANG

#### Education

## Northwestern Polytechnical University, Shaanxi, China

Sep 2022 - Present

M.Eng. System Engineering

90/100 CGPA

- Postgraduate recommendation
- Research interests: Control, Deep Learning, Reinforcement Learning

## Northwestern Polytechnical University, Shaanxi, China

Sep 2018 - Jun 2022

B.Eng. Detection, Guidance and Control Technology

3.46/4 GPA, 10/65 RANK

- Distinguished Graduate
- Outstanding Graduation Project
- Full marks in Theoretical Mechanics, Principle of Automatic Control I and Computational Methods courses.

## **Publications**

- Jiandong Zhang, **Dinghan Wang**, Qiming Yang, Zhuoyong Shi, Longmeng Ji, Guoqing Shi, Yong Wu. Loyal wingman task execution for future aerial combat: A hierarchical prior-based reinforcement learning approach[J]. Chinese Journal of Aeronautics. (co-first author), SCI JCRQ1 IF=5.7
- Dinghan Wang, Longmeng Ji, Jingbo Wang, Zhuoyong Shi, Jiandong Zhang, Qiming Yang, Guoqing Shi, Yong Wu. Dogfight Advantage Occupancy Method Based on Imperfect Information Self-play. IEEE ICCA 2024. (first author)
- Jiandong Zhang, **Dinghan Wang**, Qiming Yang, Guoqing Shi, Yi Lu. Multi-dimensional Air-Combat Decision-making of UAV Based on HRL[J]. Acta Armamentarii, 2023,44(06):1547-1563.(in Chinese)
- Yunhong Ma, Yunhao Liu, Yuqiao Yang, **Dinghan Wang**, Jian Zhang. Multi-UAV Autonomous Cooperative Task Assignment Based on Consistent Group Algorithm[J]. Unmanned Systems Technology, 2021, 4(04):51-58. (in Chinese)

# **Projects**

# Formation Intelligent Collaborative Control Technology Project

Jan 2023 - Aug 2023

Overall (Team Leader)

#### Precision Assessment Project

AY 2022 - 2023

Data Fusion Subsystem Simulation Module (Team Leader)

# Technical Skills

**Languages**: Python, C, C++ **Frontend**: HTML, CSS

Clouds & Databases: MySQL Web Technologies: Docker

Developer Tools: PyCharm, VS Code, GitHub

#### Honours and Awards

#### National Graduate Student Electronic Design Competition

Aug 2023

Northwestern Regional First Prize, Team Award (Team Leader)

National Graduate Student Electronic Design Competition (Business Track)

Aug 2023

Northwestern Regional Third Prize, Team Award

National College Students' Innovation and Entrepreneurship Training Program

Jun 2022

Third Prize, Team Award (Team leader)

**Outstanding Graduation Project** 

Distinguished Graduate

Jun 2022

AY 2020 - 2021

Scholarship from the School of Electronic Information (Twice)

AY 2019 - 2021

# Experience

# Academic Expeditions

- 2023 Future AI Masters and Global IT Training Camp
- Member of the Mathematics Modeling Association

### Community Involvement

- Served as a distinguished undergraduate representative, sharing academic and graduate application experiences with fellow undergraduates.
- Shared experiences as a senior student in university career planning courses.
- Acted as a mental health committee member during both undergraduate and master's studies, organizing psychological counseling activities during the pandemic.
- Volunteered as a material transporter during the pandemic.