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博士生，多智能体运动控制实验室 (MARMot) Laboratory，新加坡国立大学。
研究兴趣：机器人学习，路径规划，视觉语言导航，强化学习。

教育经历

- 博士，机器人，新加坡国立大学 新加坡
指导教师 Asst. Prof. Guillaume Sartoretti 2022 秋 – 2026 秋
 - 研究课题：基于机器学习的多智能体长期路径规划与导航方法。
- 硕士，机械工程（控制方向），新加坡国立大学 新加坡
指导教师 Asst. Prof. Guillaume Sartoretti, GPA: 4.5/5.0 2020 – 2021
 - 毕业论文：用于多智能体搜索救援的强化学习方法。
- 学士，机械电子工程，哈尔滨工业大学 哈尔滨 & 苏州
指导教师 Assoc. Prof. Ong Chong Jin 2016 – 2020
 - 毕业论文：面向协同控制的小型 AGV 开发。

工作经历

- 新加坡国立大学 新加坡
研究工程师 2021 – 2022
 - 从事先进的多智能体规划与探索方法研究，项目由新加坡淡马锡实验室资助。
- 飞蜂智能科技有限公司 西安
机械研发实习生 2020 夏
 - 设计家庭用垃圾自动回收系统 (GARSH) 的机械结构和视觉检测，申请下六项专利。

出版物

会议 / 期刊 / 研讨会 / 在投

- R. Zhao, X. Zhang, Y. Cao, **Y. Wang**, G. Sartoretti. Attention-based Learning for 3D Informative Path Planning. **Submitted to IEEE International Conference on Robotics and Automation**, Vienna, Austria. **ICRA 2026**
- X. Zhang, **Y. Wang**, G. Sartoretti. COMPASS: Cooperative Multi-Agent Persistent Monitoring using Spatio-Temporal Attention Network. **Submitted to IEEE International Symposium on Multi-Robot & Multi-Agent Systems**, Singapore. **MRS 2025**
- **Y. Wang**, H. He, J. Liang, Y. Cao, R. Chakraborty, G. Sartoretti. CogniPlan: Uncertainty-Guided Path Planning with Conditional Generative Layout Prediction. **Submitted to Conference on Robot Learning**, Seoul, Korea. **CoRL 2025**
- J. Chiun, S. Zhang, **Y. Wang**, Y. Cao, G. Sartoretti. MARVEL: Multi-Agent Reinforcement Learning for constrained field-of-View multi-robot Exploration in Large-scale environments. In *IEEE International Conference on Robotics and Automation*, Atlanta, USA. **ICRA 2025**
- **Y. Wang**, Y. Cao, J. Chiun, S. Koley, M. Pham, G. Sartoretti. ViPER: Visibility-based Pursuit-Evasion via Reinforcement Learning. In *Conference on Robot Learning*, Munich, Germany. **CoRL 2024**

- Y. Cao, R. Zhao, **Y. Wang**, B. Xiang, G. Sartoretti. Deep Reinforcement Learning-based Large-scale Robot Exploration. In *IEEE Robotics and Automation Letters* (vol.9, no.5, pp.4631-4638). **RA-L 2024**
- **Y. Wang**, Y. Wang, Y. Cao, G. Sartoretti. Spatio-Temporal Attention Network for Persistent Monitoring of Multiple Mobile Targets. In *IEEE/RSJ International Conference on Intelligent Robots and Systems* (pp.3903-3910), Detroit, USA. **IROS 2023**
- Y. Wang, **Y. Wang**, G. Sartoretti. Full Communication Memory Networks for Team-Level Cooperation Learning. In *Springer's Autonomous Agents and Multi-Agent Systems*, 37, 33. **J-AAMAS 2023**
- **Y. Wang**, G. Sartoretti. Learning Simultaneous Motion Planning and Active Gaze Control for Persistent Monitoring of Dynamic Targets. In *Workshop on Active Methods in Autonomous Navigation*. **ICRA 2023**
- Y. Cao, T. Hou, **Y. Wang**, X. Yi, and G. Sartoretti. ARiADNE: A Reinforcement learning approach using Attention-based Deep Networks for Exploration. In *IEEE International Conference on Robotics and Automation* (pp.10219-10225), London, UK. **ICRA 2023**
- Y. Cao, **Y. Wang**, A. Vashisth, H. Fan, and G. Sartoretti. CATNIPP: Context-Aware Attention-based Network for Informative Path Planning. In *Conference on Robot Learning* (pp.1928-1937), Auckland, New Zealand. PMLR. **CoRL 2022**

Selected Patent

- Z. Luo, **Y. Wang**, Y. Fu, J. Lu, and H. Zhang, 一种垃圾分类转动装置. 实用新型专利, CN213474287U. **2021**
- Z. Luo, **Y. Wang**, Y. Fu, J. Lu, and H. Zhang, 一种垃圾分类转动装置. 实用新型专利, CN213325514U. **2021**
- **Y. Wang**, Y. Fu, Z. Luo, H. Zhang, and J. Lu. 智能垃圾桶 (Dys-1). 外观设计专利, CN306247881S. **2020**

学术服务

教学

- **教学助理** **新加坡**
- *NUS ME3103* 机械系统设计 **2021 春**

竞赛

- **2023 年新加坡飞行器竞赛** **新加坡**
- 评委嘉奖奖 & 冠军奖 - 第五名 **2023**
- **第六届中国国际“互联网 +”大学生创新创业大赛** **中国广州**
- 金奖 (红旅赛道), 全国 **2020**

期刊与会议审稿

- *IEEE Robotics and Automation Letters (RA-L)* **2023/2024/2025**
- *IEEE International Conference on Robotics and Automation (ICRA)* **2025**
- *Robotics: Science and Systems (RSS)* **2024**
- *Association for the Advancement of Artificial Intelligence (AAAI)* **2023/2024/2025**
- *Conference on Robot Learning (CoRL)* **2023/2024/2025**
- *European Conference on Artificial Intelligence (ECAI)* **2023**
- *IEEE Transactions on Automation Science and Engineering (T-ASE)* **2023**
- *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)* **2023/2024/2025**
- *International Symposium on Experimental Robotics (ISER)* **2023**
- *International Joint Conference on Artificial Intelligence (IJCAI)* **2022/2023**