

Yiming WANG (Mingle)

Ph.D candidate

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State Key Laboratory of Internet of Things for Smart City

Department of Computer Information Science,

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N21, University of Macau (UM), Avenida da Universidade, Taipa, Macau, China



EDUCATION BACKGROUND

Harbin Institute of Technology (C9)

09/2016-06/2020

- B.S. in Information and Computing Science
- GPA 88.96/100 (**top 10%**) Postgraduate Recommendation

University of Macau (C9+)

09/2020-06/2022

- M.S. in Data Science
- GPA 95.27/100 (**top 5%**)
- Research assistant supervised by Prof. Ryan, Leong Hou U and Prof. Chenzhong Xu (**IEEE Fellow**)

University of Macau (C9+)

09/2022-Present

- Ph.D. of Computer Science
- Top 30 University in Asia, Top 180 University in the world, C9 project
- Intelligent Transportation research group in **State Key Laboratory** of Internet of Things for Smart City

Nanyang Technological University

10/2025-01/2026

- Non-Graduating Research Ph.D. student of College of Computing and Data Science
- Top 3 University in Asia, Top 11 University in the world
- NTU AI-for-X Lab, supervised by Prof. Bo An

SELECTED PUBLICATION

(1) **Yiming WANG**, Kaiyan ZHAO, Xu LI, Yan LI, Jiayu CHEN, Steven MORAD and Leong Hou U Explore to Learn: Latent Exploration through Disentangled Synergy Patterns for Reinforcement Learning in Overactuated Control AAAI 2026 **oral (top 4.2%) (CCF-A)**

(2) **Yiming WANG**, Kaiyan ZHAO, Furui LIU and Leong Hou U Rethinking Exploration in RL with Effective Metric-Based Exploration Bonus. NeurIPS 2024 **spotlight (top 2.8%) (CCF-A)**

(3) **Yiming WANG**, Ming YANG, Binbin SUN, Furui LIU, and Leong Hou U Efficient potential-based exploration in reinforcement learning using inverse dynamic bisimulation metric. NeurIPS 2023 (CCF-A)

(4) **Yiming WANG**, Kaiyan Zhao, Ming YANG, Yan LI, Furui LIU, Jiayu CHEN and Leong Hou U DSAP: Enhancing Generalization in Goal-Conditioned Reinforcement Learning. AAAI 2026 (CCF-A)

(5) **Yiming WANG**, Kaiyan Zhao, Borong ZHANG, Yan LI and Leong Hou U Latent State-Predictive Exploration for Deep Reinforcement Learning. AAAI 2026 (CCF-A)

(6) **Yiming WANG**, Kaiyan Zhao, Yan Li and Leong Hou U BILE: An Effective Behavior-based Latent Exploration Scheme for Deep Reinforcement Learning. IJCAI 2025 (CCF-A)

(7) **Yiming WANG***, Kaiyan Zhao*, Yuyang CHEN, Xiaoguang Niu, Leong Hou U Efficient Diversity-based Experience Replay for Deep Reinforcement Learning. IJCAI 2025 (CCF-A)

(8) **Yiming WANG**, Ming YANG, Furui LIU, Leong Hou U, Yali DU Causal-Graph Based Intrinsic Motivation for Reinforcement Learning. Submitted to TNNLS 2025 (**SCI Q1 & CCF B**)

(9) Shaocheng Yan, **Yiming Wang**, Kaiyan Zhao, Pengcheng S, Zhenjun Z HeMoRa: Unsupervised Heuristic Consensus Sampling for Robust Point Cloud Registration. CVPR 2025 (**CCF-A**)

(10) Ming YANG, Kaiyan ZHAO, **Yiming WANG**, Yali DU, Furui LIU, Leong Hou U Team-wise effective communication in multi-agent reinforcement learning. AAMAS 2024 (**CCF-B**)

(11) Yuyang Chen, Kaiyan ZHAO, **Yiming WANG**, Ming Yang, Xiaoguang Niu Enhancing LLM Agents for Code Generation with Possibility and Pass-rate Prioritized Experience Replay CoRR 2024

(12) Ming YANG, **Yiming WANG**, Leong Hou U, Yali DU TieComm:Multi-agent Cooperative Reinforcement Learning Method based on Ties Theory. DASFFA 2023 (**CCF-B**)

(13) Ming YANG, **Yiming WANG**, Leong Hou U, Mingliang ZHOU, Yang YU MixLight: Mixed-agent Cooperative Reinforcement Learning for Traffic Light Control. IEEE Transactions on Industrial Informatics 2023 (**SCI Q1 top**)

APPROVED PROPOSALS

Science and Technology Development Fund (FDCT), Macao SAR

Urban Smart-Traffic Decision System Based on Novel Graph-based Reinforcement Learning (0031/2022/A) – **MOP 3 million**, Jan 2022 – Dec 2024

Role: Co-investigator (ranked 2nd among project members) & Principal Student Author

Macao Key R&D Special Programme

Key Technologies and Application Platform for Human–Machine–Thing Integrated Intelligent Transportation in Compact Cities (20200728165205338/AKP)

MOP 1 million, Jan 2021 – Dec 2023

Role: Lead Student Researcher & Principal Student Author

Strategic Sci-Tech Innovation Cooperation Key Project

(1st-batch Ministry of Science & Technology Joint Grant for Hong Kong/Macao/Taiwan)

Core Technologies and Systems for Vector Databases Enabling Large-Scale Knowledge-Graph Embedding (20210121162459689/AFJ)

CNY 3 million, Jan 2023 – Dec 2025

Role: Lead Student Researcher & Principal Student Author

Joint Research Project with Bowei Enterprises, Macao

Intelligent Decision-Making System for Smart-City IoT Based on Efficient Reinforcement Learning — sub-project of 2020J01-ASF

MOP 0.8 million, Jun 2020 – Dec 2021.

Role: Lead Student Researcher & Principal Student Author

PATENTS

- Causality-based Reinforcement Learning for Generalizing Goal-condition Agents. China Invention Patent, filed April 2025, under processing
- An Efficient Diversity-based Experience Replay Method for Deep Reinforcement Learning. China Invention Patent, filed April 2025, under processing

ACADEMIC SERVICES

Top Tier Conference Reviewer: ICML, ICLR, NeurIPS, AAAI, IJCAI, ICDE, DASFFA, KDD, VLDB, CIKM

Jurnal Reviewer: TMLR, ESWA, IEEE TNNLS, IEEE T-ITS, IEEE T-IV, AJCST, KBS

TEACHING ASISTANT

- **CISC7201 Introduction to Data Science Programming**
- **CISC7022 Big Data Processing and Analysis**

- CISC7022 Introduction to Reinforcement Learning

PROFESSIONAL EXPERIENCE

<i>Chaozhi AI Lab</i>	<i>12/2022 – Present</i>
<i>Research Scientist (part-time)</i>	
<i>Mentored 3 student interns</i>	
Co-Leads the Complex Decision Making Group	
<i>Guangdong Institute of Intelligence Science and Technology</i>	<i>08/2024 - Present</i>
<i>Research Intern</i>	
Supervised by Prof. Yimin Wang	
AI for biology, project led by Prof Xu Zhang (Academician of Chinese)	
<i>Huawei Noah's Ark Lab</i>	<i>04//2022 – 10/2022</i>
<i>Research Intern</i>	
Supervised by Prof. Furui Liu	
Causal Reinforcement Learning	
<i>BoardWare Intelligence Technology Limited.</i>	<i>07//2021 – 10/2021</i>
<i>Research Assistant</i>	
Supervised by Prof. Ryan Leong Hou U	
Reinforcement Learning-based Traffic Light Control	

AWARDS AND HONORS

<i>First Prize</i> Award of 8th Greater Bay Area IT Application System Development Competition	<i>12/2023</i>
<i>Third Prize</i> Poster Award of MCSCT	<i>11/2023</i>
<i>NeurIPS Scholar</i> Award	<i>09/2023</i>
UM PhD <i>Full Scholarship</i>	<i>09/2022-09/2026</i>
UM Master <i>Research Scholarship</i>	<i>09/2021&09/2020</i>
<i>Honorable mention</i> in Mathematical Contest in Modeling U.S (MCM)	<i>02/2019</i>
<i>Learning Excellence Scholarship</i> of HIT	<i>11/2019</i>
<i>Learning Excellence Scholarship</i> of HIT	<i>11/2018</i>

MENTORED STUDENTS

Kaiyan Zhao: University of Macau (M.S.) --> Wuhan University (Ph.D)
 Yuyang Chen: Nanjing University (B.S.) --> Northwestern University (Ph.D)
 Xinlin Lu: Jinlin University (B.S.) --> University of Macau (Ph.D)
 Yuteng Lin: University of Bristol (B.S.) --> University of Macau (M.S.)

LANGUAGE/ADDITIONALS

English Language: IELTS band:7.0
 Chinese Language: Native proficiency
 Programming Skills: Python, C++, Pytorch