

Yiming WANG (Mingle)

Ph.D candidate

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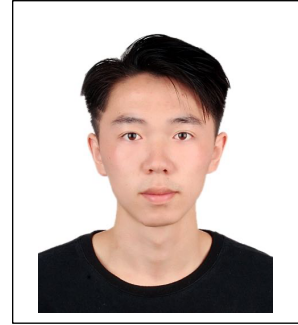
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State Key Laboratory of Internet of Things for Smart City

Department of Computer Information Science,

University of Macau,

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

Chaozhi AI Lab 12/2022 – Present

Research Scientist (part-time)

Mentored 3 student interns

Co-Leads the Complex Decision Making Group

Guangdong Institute of Intelligence Science and Technology

08/2024 - Present

Research Intern

Supervised by Prof. Yimin Wang

AI for biology, project led by **Prof Xu Zhang (Academician of Chinese)**

Huawei Noah's Ark Lab

04/2022 – 10/2022

Research Intern

Supervised by Prof. Furui Liu

Causal Reinforcement Learning

BoardWare Intelligence Technology Limited.

07/2021 – 10/2021

Research Assistant

Supervised by Prof. Ryan Leong Hou U

Reinforcement Learning-based Traffic Light Control

AWARDS AND HONORS

First Prize Award of 8th Greater Bay Area IT Application System Development Competition 12/2023

Third Prize Poster Award of MCSCT 11/2023

NeurIPS Scholar Award 09/2023

UM PhD **Full Scholarship** 09/2022-09/2026

UM Master **Research Scholarship** 09/2021&09/2020

Honorable mention in Mathematical Contest in Modeling U.S (MCM) 02/2019

Learning Excellence Scholarship of HIT 11/2019

Learning Excellence Scholarship of HIT 11/2018

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