# 胡昊

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### 教育背景 EDUCATION

清华大学, 交叉信息研究院, 博士研究生在读

专业 计算机科学与技术

GPA 3.92/4

排名 1/15

北京大学、工学院、理学学士

专业 理论与应用力学

GPA 3.73/4

排名 5/31

北京大学,信息科学与技术学院,理学学士

专业 计算机科学与技术(双学位)

2019年9月-至今

2015年9月-2019年7月

2016年9月-2019年7月

#### 科研经历 RESEARCH

Machine Intelligence Group, 清华大学, 交叉信息研究院

导师 张崇洁 助理教授 高阳 助理教授

研究方向 深度强化学习,强化学习理论,离线强化学习

**NURL Group**, Northwestern University, IEMS

导师 汪昭然 助理教授

研究方向 强化学习理论

VMC Group, 北京大学, 信息科学与技术学院

导师 张史梁 副教授

研究方向 语义分割,自动驾驶

2019年9月-至今

2023年4月-2023年9月

2017年11月-2018年6月

#### 实习经历 INTERNSHIP

微软亚洲工程院、软件开发实习生

2018年6月-2018年9月

- 基于 Bing 点击数据的新闻文本分类与时事通讯推荐
- Sagitt 等内部工具开发

#### 发表论文 PUBLICATIONS

- Reason for Future, Act for Now: A Principled Architecture for Autonomous LLM Agents Zhihan Liu\*, Hao Hu\*, Shenao Zhang\*, Hongyi Guo, Shuqi Ke, Boyi Liu, Zhaoran Wang NeurIPS Workshop on Foundation Models for Decision Making, 2023
- Unsupervised Behavior Extraction via Random Intent Priors
   Hao Hu\*, Yiqin Yang\* Jianing Ye, Ziqing Mai, Chongjie Zhang
   Thirty-seventh Conference on Neural Information Processing Systems (NeurIPS, 2023)

• One Objective to Rule Them All: A Maximization Objective Fusing Estimation and Planning for Exploration

Zhihan Liu\* Miao Lu\* Wei Xiong\* Han Zhong, **Hao Hu**, Shenao Zhang, Sirui Zheng, Zhuoran Yang, Zhaoran Wang

Thirty-seventh Conference on Neural Information Processing Systems (NeurIPS, 2023)

• What is Essential for Unseen Goal Generalization of Offline Goal-conditioned RL?

Ruiyang, Yong Lin, Xiaoteng Ma, **Hao Hu**, Chongjie Zhang, Tong Zhang Fortieth International Conference on Machine Learning (**ICML**), 2023

• The Provable Benefit of Unsupervised Data Sharing for Offline Reinforcement Learning

Hao Hu\*, Yiqin Yang\*, Qianchuan Zhao, Chongjie Zhang

Eleventh International Conference on Learning Representations (ICLR), 2023

• Flow to Control: Offline Reinforcement Learning with Lossless Primitive Discovery

Yiqin Yang\*, **Hao Hu**\*, Wenzhe Li\*, Siyuan Li, Chongjie Zhang, Qianchuan Zhao Thirty-Seventh AAAI Conference on Artificial Intelligence. (**AAAI**), 2023

• On the Role of Discount Factor in Offline Reinforcement Learning

Hao Hu\*, Yiqin Yang\*, Qianchuan Zhao, Chongjie Zhang

Thirty-ninth International Conference on Machine Learning (ICML), 2022

• Offline Reinforcement Learning with Value-based Episodic Memory

Xiaoteng Ma\*, Yiqin Yang\*, Hao Hu\*, Qihan Liu, Jun Yang, Chongjie Zhang, Qianchuan Zhao, Bin Liang

Tenth International Conference on Learning Representations (ICLR), 2022

• On the Estimation Bias in Double Q-Learning

Zhizhou Ren, Guangxiang Zhu, **Hao Hu**, Beining Han, Jianglun Chen, Chongjie Zhang Thirty-fifth Conference on Neural Information Processing Systems (**NeurIPS**), 2021

• MetaCURE: Meta Reinforcement Learning with Empowerment-Driven Exploration

Jin Zhang\*, Jianhao Wang\*, Hao Hu, Tong Chen, Yingfeng Chen, Changjie Fan, Chongjie Zhang Thirty-eighth International Conference on Machine Learning (ICML), 2021

• Generalizable Episodic Memory for Deep Reinforcement Learning

*Hao Hu*, *Jianing Ye*, *Zhizhou Ren*, *Guangxiang Zhu*, *Chongjie Zhang* Thirty-eighth International Conference on Machine Learning (**ICML**), 2021

• Query-Efficient Offline Preference-Based Reinforcement Learning via In-Dataset Exploration

Hao Hu\*, Yiqin Yang\*, Shuai Wang, Bo Liu, Yang Gao, Chongjie Zhang Under Review

• Bayesian Offline-to-Online Reinforcement Learning : A Realist Approach

Hao Hu\*, Yiqin Yang\*, Jianing Ye, Ziqing Mai, Yujing Hu, Tangjie Lv, Changjie Fan, Qianchuan Zhao, Chongjie Zhang

Under Review

• Stylized Offline Reinforcement Learning: Extracting Diverse High-Quality Behaviors from Heterogeneous Datasets

Yihuan Mao, Chengjie Wu, Xi Chen, **Hao Hu**, Ji Jiang, Tianze Zhou, Tangjie Lv, Changjie Fan, Zhipeng Hu, Yi Wu, Yujing Hu, Chongjie Zhang

Under Review

## 获得荣誉 Honors

灵均领航奖学金	2023-2024
惠妍英才奖学金	2022-2023
丰田奖学金 (一等)	2021-2022
北京大学优秀毕业生	2019.7
全国周培源力学竞赛二等奖	2017.5
国家奖学金	2016-2017
全国大学生物理竞赛 (部分赛区) 特等奖	2016.9
北京大学学习优秀奖	2015-2016