TONGZHOU MU

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EDUCATION

University of California, San Diego

- *Ph.D. in Computer Science & Engineering* — ***Advisor:*** *Hao Su* — 2019 – Present
- *M.S. in Computer Science & Engineering* — ***GPA:*** *4.0/4.0* — 2017 – 2019

Zhejiang University

- *B.Eng. in Computer Science & Technology* — ***GPA:*** *3.8/4.0,* ***Major GPA:*** *3.97/4.00* — 2013 – 2017

RESEARCH INTERESTS

- Reinforcement Learning (especially object-centric RL and model-based RL)
- Planning & Control
- Concept Discovery and Reasoning

PUBLICATIONS

- **Tongzhou Mu***, Jiayuan Gu*, Zhiwei Jia, Hao Tang, and Hao Su. "Refactoring Policy for Compositional Generalizability using Self-Supervised Object Proposals." In *the 34th Conference on Neural Information Processing Systems (NeurIPS)*, 2020.
- Fangchen Liu, Zhan Ling, **Tongzhou Mu**, and Hao Su. "State Alignment-based Imitation Learning." In *the 8th International Conference on Learning Representations (ICLR)*, 2020.
- Xingchao Liu*, **Tongzhou Mu***, and Hao Su. "Transfer Value or Policy? A Value-centric Framework Towards Transferrable Continuous Reinforcement Learning." In *the Deep Reinforcement Learning Workshop at the 32th Conference on Neural Information Processing Systems (NeurIPS)*, 2018.
- Zebang Shen, Hui Qian, **Tongzhou Mu**, and Chao Zhang. "Accelerated Doubly Stochastic Gradient Algorithm for Large-scale Empirical Risk Minimization." In *the 26th International Joint Conference on Artificial Intelligence (IJCAI)*, 2017.
- Zebang Shen, Hui Qian, Tengfei Zhou, and **Tongzhou Mu**. "Adaptive Variance Reducing for Stochastic Gradient Descent." In *the 25th International Joint Conference on Artificial Intelligence (IJCAI)*, 2016.

** indicates equal contribution*

INDUSTRY EXPERIENCES

Wormpex AI Research — Seattle, United States
Full-Time Research Intern — June 2020 – Sep 2020

- Designed a customer behavior model and optimized the convivence store environment layout based on it.

Intel AI — San Diego, United States
Full-Time Research Intern — July 2019 – Sep 2019

- Worked on the memory-constrained navigation problem based on a method combining RL and planning.

Microsoft Research Asia — Beijing, China
Full-Time Intern at Visual Computing Group — Apr 2017 – Aug 2017

- Conducted research on visual navigation in simulated indoor scenes by using deep reinforcement learning.

DiDi Inc. (A Chinese mobile transportation platform like Uber) — Zhejiang, China
Full-Time Intern at Autonomous Driving Group — Mar 2017 – Apr 2017

- Worked on developing an optimization-based trajectory planning system for autonomous driving.

AWARDS & HONORS

- ACM-ICPC (International Collegiate Programming Contest) Asia Regional Contest **Gold Medal** — 2015
- Award of Excellence for Stars of Tomorrow Internship Program, Microsoft Research Asia — 2017
- China Computer Federation Elite Collegiate Award (top 108 in China) — 2016

TEACHING

- Teaching Assistant for *CSE 152 Introduction to Computer Vision* at UC San Diego — Fall 2018

PROGRAMMING SKILLS

Programming Languages: Python, C/C++, MATLAB **Frameworks:** PyTorch, TensorFlow