

Mingde "Harry" Zhao



BASICS

Email: mingde.zhao@mail.mcgill.ca

Location: Montréal & Ottawa, Canada

Homepage: <http://mingde.world>

Languages: English (native), 汉语(母语), Français (avancé)

RESEARCH INTERESTS

Reasoning, Planning, Decision-Making, Consciousness, Higher-Level Cognition

EDUCATION

Doctor of Philosophy, Computer Science 2020 - Now

McGill University / Mila (L'institut québécois d'intelligence artificielle), CGPA: 4.00/4.00

Advisors: Doina Precup & Yoshua Bengio

Master of Science, Computer Science 2018 - 2020

McGill / Mila, CGPA: 4.00/4.00; Advisors: Doina & Xiaowen Chang

Bachelor of Engineering, Computer Science & Technology 2014 - 2018

Dalian University of Technology, GPA: 89.0%

PAPER HIGHLIGHTS (Check [Google Scholar](#) for complete list)

- "*Consciousness-Inspired Spatio-Temporal Abstractions for Better Generalization in Reinforcement Learning*" - M.Z., S. Alver, H. van Seijen, R. Laroché, D. Precup, Y. Bengio @ ICLR 2024.
- "*Training Matters: Unlocking Potentials of Deeper Graph Convolutional Neural Networks*" - S. Luan*, M.Z.*, X.W. Chang & D. Precup @ Complex Networks 2023, ORAL.
- "*Revisiting Heterophily For Graph Neural Networks*" - S. Luan, C. Hua, Q. Lu, J. Zhu, M.Z., S. Zhang, X.W. Chang, D. Precup @ NeurIPS 2022.
- "*Temporal Abstractions-Augmented Temporally Contrastive Learning: An Alternative to the Laplacian in Reinforcement Learning*" - A. Erraqabi, M.C. Machado, M.Z.*, S. Sukhbaatar, A. Lazaric, L. Denoyer, Y. Bengio @ UAI 2022.
- "*A Consciousness-Inspired Planning Agent for Model-Based Reinforcement Learning*" - M.Z.*, Z. Liu*, S. Luan*, S. Zhang*, D. Precup, Y. Bengio @ NeurIPS 2021.
- "*Bi-space Interactive Cooperative Coevolution for Large Scale Blackbox Optimization*" - H. Ge, M.Z., Y. Hou, K. Zhang, L. Sun, G. Tan, Q. Zhang, C.L.P. Chen @ Applied Soft Computing, 2020.
- "*META-Learning State-Based Eligibility Traces for More Sample-Efficient Policy Evaluation*" - M.Z.*, S. Luan*, I. Porada*, X.W. Chang & D. Precup @ AAMAS 2020.
- "*Break the Ceiling: Stronger Multi-Scale Deep Graph Convolutional Networks*" - S. Luan*, M.Z.*, X.W. Chang & D. Precup @ NeurIPS 2019.
- "*An Interactive Many Objective Evolutionary Algorithm with Cascade Clustering & Reference Point Incremental Learning*" - H. Ge*, M.Z.*, L. Sun, Z. Wang, G. Tan, Q. Zhang & C.L.P. Chen @ IEEE Transactions on Evolutionary Computation, 2018.

* Equal Contributions

WORK & VOLUNTEERING

Visiting Student @ Brain and Mind Research Institute, uOttawa	2024 - 2025
Research Intern @ Borealis AI (Montreal)	2024
Student Researcher @ Haiper (Canada)	2021 - 2023
Research Intern @ Microsoft Research (Montreal)	2022 - 2023
Conference Paper Reviewer @ NeurIPS	2022
Teaching Assistant @ McGill University	2019 - 2021

AWARDS & SCHOLARSHIPS

Ph.D.:

FRQNT Ph.D. Fellowship (*1st-place recipient*, 2020)

Master:

DeepMind Graduate Award (2019)

Undergraduate:

Academic Excellence Awards (2015 - 2018)

Outstanding Bachelor Thesis (2018)

Outstanding Student Researcher of the Year (2018)

