

Mingde "Harry" Zhao



BASICS

Email: mingde.zhao@mail.mcgill.ca

Location: Montréal & Ottawa, Canada

Homepage: pwnerharry.github.io

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)

- *"Rejecting Hallucinated State Targets during Planning"* – **M.Z.**, T. Sylvain, R. Laroché, D. Precup, Y. Bengio, submitted to *ICML 2025*.
- *"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*

* Equal Contributions

Computation, 2018.

WORK & VOLUNTEERING

Conference Paper Reviewer @ ICML	2025
Visiting Student @ Brain and Mind Research Institute, uOttawa	2024 - 2025
Research Intern @ RBC Borealis (previously 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)

