Tianyue H. Zhang

Email: tianyue.zhang@mila.quebec · *Website:* tianyuehz.github.io
Github: tianyuehz · *Publication:* Google Scholar

Education

Sept. 2023 - Present	**Mila/Université de Montréal** GPA: $A^+ \equiv 4.33$ *Ph.D. Computer Science, DIRO* Supervised by Dr. Simon Lacoste-Julien
Sept. 2021 - Sept. 2023	**University of British Columbia** GPA: $95.3/100 \equiv 4.33$ *M.Sc. Computer Science* Supervised by Dr. Mark Schmidt
Sept. 2015 - Sept. 2019	**University of British Columbia** GPA: $85/100 \equiv 3.95$ *B.Sc. Combined Honours in Computer Science and Mathematics* Dean's Honour List; Graduated with Distinction

Publications

Understanding Adam Requires Better Rotation Dependent Assumptions Paper
NeurIPS 2025
T. Zhang*, *L. Maes**, *A. Jolicoeur-Martineau, I. Mitliagkas, D. Scieur, S. Lacoste-Julien, C. Guille-Escuret*

Addressing Concept Mislabeling in Concept Bottleneck Models Through Preference Optimization Paper
ICML 2025; Bi-Align Workshop Workshop at ICLR 2025 (Oral)
*E. Penaloza**, ***T. Zhang***, *L. Charlin, M. E. Zarlenga*

Connecting Thompson Sampling and UCB: Towards More Efficient Trade-offs Between Privacy and Regret Paper
ICML 2025
B. Hu, Z. Huang, ***T. Zhang***, *M. Lecuyer, N. Hegde*

On PI Controllers for Updating Lagrange Multipliers in Constrained Optimization Paper
ICML 2024
*M. Sohrabi**, *J. Ramirez**, ***T. Zhang***, *S. Lacoste-Julien, J. Gallego-Posada*

Optimistic Thompson Sampling for Episodic Reinforcement Learning Paper
UAI 2023
B. Hu, ***T. Zhang***, *N. Hegde, M. Schmidt*

From 623514908081161688290923870 8 to 29: Vanilla Thompson Sampling Revisited Paper
NeurIPS Opt Workshop 2023
B. Hu, ***T. Zhang***

Selected Awards

2025	**NSERC PGSD, $40000 annually**
2025	**Mila Excellence Scholarships – Women in AI, $8000 annually**
2023	**Professor Cho Diversity Scholarship, $1500**
2022	**UBC Cloud Innovation Center Fellowship, $20000**
2019	**NSERC Undergraduate Student Research Award, $6000**
2018	**UBC Science Faculty International Student Scholarship, $10000**
2015	**UBC Outstanding International Student Award, $6000**

Thesis

Optimistic Thompson Sampling: Strategic Exploration in Bandits and RL Thesis
Supervisory committee: Dr. Mark Schmidt and Dr. Mathias Lecuyer

Selected Service

Reviewer	**ICML 2025; ICLR 2025; NeurIPS 2024**
Organizer	**Montreal MLOpt**
Organizer	**Women@Mila**
Volunteer	**WiML; NeurIPS 2023; UAI 2023**
Student Reviewer	**Graduate Recruiting Committee at Mila 2024; UBC 2022**
Volunteer	**UBC Computer Science Tri-Mentoring Program, 2018**

Teaching Assistant

Sept. 2023 - Dec. 2023	**Polytechnique Montreal INF8245E - Machine Learning**
Sept. 2021 - May 2023	**UBC · CPSC 532M/340: Machine Learning and Data Mining**
Jan. 2018 - Apr. 2018	**UBC · Math 152: Linear Systems**
Sept. 2017 - Apr. 2018	**UBC · CPSC 121: Models of Computation**
July 2017 - Aug. 2017	**UBC · Math 102: Integral Calculus**

Selected Presentations

Nov. 2024	**Understanding Adam Requires Better Rotation Dependent Assumptions** *MTL MLOpt*
June 2024	**On PI Controllers for Updating Lagrange Multipliers in Constrained Optimization** *Tsinghua University, Statistical Artificial Intelligence & Learning Group*
Apr. 2023	**Deep exploration via randomized value function** *UBC · Reinforcement Learning Reading Group*
Oct. 2022	**Language Models are Few Shot Learners (GPT-3)** *UBC · Machine Learning Reading Group*
Dec. 2021	**Reinforcement Learning and Autonomous Driving** *UBC · CPSC 340: Machine Learning and Data Mining*
Nov. 2021	**Probabilistic Topic Modeling** *UBC · CPSC 503: Computational Linguistics*

Work Experience

May 2022 - Dec. 2022	**Research Mentor** *UBC-AWS Cloud Innovation Center* Advised undergraduate students in building machine learning model prototypes in collaboration with AWS
Sept. 2019 - Apr. 2021	**Software Engineer** *Magnitude - Simba Technologies* Developed JDBC driver for Amazon Redshift Database using Java and SQL; Designed test packages and website interface using React.js and HTML/CSS
July 2018 - Aug. 2018	**Research Intern** *Bank of China International, London* Trained regression models for U.S. 10 Year Treasury data and composed financial reports on futures and options predictions

Competitions

Dec. 2018	**Putnam Competition, Mathematical Association of America** *Ranked top 1500 in North America*
Sept. 2014	**Chinese Physics Olympiad (CPhO)** *Guangdong Provincial Secondary Prize*

Language

Mandarin (native), English (fluent), Cantonese (intermediate), French (beginner)