Tyler Kastner

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Education

University of Toronto *PhD. Computer Science*   September 2022 – December 2026
Focus on fundamental reinforcement learning and RL applied to LLM reasoning.

McGill University *MSc. Computer Science*   June 2021 – August 2022
Focus on representation learning in reinforcement learning.

McGill University *BSc. Joint Honours in Math and Computer Science*   September 2018 – May 2021
Graduated with First Class Honours and Distinction.

Publications

Categorical Distributional RL with KL Divergence: Convergence and Asymptotics. **T. Kastner**, M. Rowland, Y. Tang, M. Erdogdu, A.-m. Farahmand. ICML 2025.

When does Self-Prediction help? Understanding Auxiliary Tasks in Reinforcement Learning. C. Voelcker, **T. Kastner**, I. Gilitschenski, A.-m. Farahmand. RLC 2024.

Distributional Model Equivalence for Risk-Sensitive Reinforcement Learning. **T. Kastner**, M. Erdogdu, A.-m. Farahmand. NeurIPS 2023.

A Kernel Perspective on Behavioural Metrics for Reinforcement Learning. P. S. Castro, **T. Kastner**, P. Panangaden, M. Rowland. TMLR 2023. (Authors listed alphabetically.)

Mico: Learning improved representations via sampling-based state similarity for Markov decision processes. P. S. Castro*, **T. Kastner***, P. Panangaden, M. Rowland. NeurIPS 2021.

Experience

Meta · **Research Scientist Intern** · *Menlo Park, California*   September 2025 - January 2026
- Incoming intern on the Monetization team. Project will involve applying RL to ad recommendations.

Morgan Stanley · **Quantitative Research Intern** · *Montreal, Canada*   May 2024 - August 2024
- Intern on the eFx team. Applied various machine learning techniques to predict currency price movements.

Awards

- Walter C. Sumner Memorial Fellowship 2023-2024.
- DeepMind Fellowship 2021-2022.
- Quebec Merit Scholarship for Computer Science 2021.
- NSERC Undergraduate Student Research Award 2020.
- Nick Arganski Memorial Scholarship 2018.

Academic service

- Reviewer for ICML ('22, '24, '25), NeurIPS ('22, '23, '24, '25), AISTATS ('22, '24), journals TMLR and Mathematical Structures in Computer Science.
- Teaching assistant for multiple Math, Statistics, and CS courses at McGill & University of Toronto.

Skills

Proficient in Python. Most used libraries are JAX, PyTorch, NumPy, Pandas, and SciPy.