# Mete Kemertas

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# Education

# University of Toronto, Vector Institute

 $PhD \cdot Computer Science \cdot Sep 2020 - Present$ 

· Focus in reinforcement learning.

# University of Toronto

 $MScAC \cdot Computer Science \cdot Sep 2016 - Dec 2017$ 

· Focus in machine learning and natural language processing.

## McGill University

B.Eng.  $\cdot$  Electrical Engineering  $\cdot$  Sep 2013 - Dec 2015

- · Minor degree: Software Engineering.
- · Served as a TA for MATH 270: Applied Linear Algebra for two semesters.

## Istanbul Technical University

B.Sc. · Electronics and Communication Engineering · Sep 2011 - Jun 2013

- · Transferred to McGill University.
- · Ranked 2nd in class before transfer.

## **Publications**

#### Approximate policy iteration with bisimulation metrics.

M. Kemertas, A. Jepson.

Transactions on Machine Learning Research (TMLR), 2022.

#### Towards robust bisimulation metric learning.

M. Kemertas, T.T. Aumentado-Armstrong (equal contribution).

Advances in Neural Information Processing Systems (NeurIPS), 2021.

#### Dependency parsing with structure preserving embeddings.

Á. Kádár, L. Xiao, **M. Kemertas**, F. Fancellu, A. Jepson and A. Fazly. Conference of the European Chapter of the Association for Computational Linguistics (EACL), 2021.

#### RankMI: A mutual information maximizing ranking loss.

M. Kemertas, L. Pishdad, K. Derpanis, and A. Fazly.

Conference on Computer Vision and Pattern Recognition (CVPR), 2020.

#### Dynamic scheduling of MPI-based distributed deep learning training jobs.

T. Capes, V. Raheja, M. Kemertas, and I. Mohomed.

MLSys Workshop at Neural Information Processing Systems (NeurIPS), 2018.

Patents · US16/725717 · Feature Scrubbing: Anonymize Images on Home Devices

Patent Applications

 $\cdot$  US17/072905  $\cdot$  Coarse-to-fine Multimodal Gallery Search System

with Attention-based Neural Network Models

· US16/805051 · A Method for Deep Representation Learning

· US16/690999 · A System and Method of Batch Size Adaptive Workload Scheduler

Industry Experience Samsung AI Centre · Toronto, ON

PhD Student Researcher (part-time) · Apr 2021 - Sep 2022

 $\frac{\text{Senior Research Engineer}}{\text{Research Engineer}} \cdot \text{Mar 2020 - Sep 2020}$ 

 $\cdot$  Research in machine learning and vision-language integration.

- · Served as technical lead/co-lead for various research projects.
- · Multiple publications at leading AI venues.
- · 1 patent and 3 pending patent applications.

Tealbook Inc. · Toronto, ON

Machine Learning Engineer · May 2017 - May 2018

- · First ML engineer of the company.
- · Removed significant data licensing costs by applying machine learning to produce a large database of the world's suppliers.
- · Designed and developed a recommendation engine for supplier discovery.

Ormuco Inc.  $\cdot$  Montreal, QC

Software Developer  $\cdot$  May 2016 - Sep 2016

- · Developed the backend of a notification and messaging system.
- · Improved system performance by optimizing database queries and redesigning the caching system on the server side.

 $\mathbf{Ericsson} \cdot Montreal, \ QC$ 

Software Development Intern · May 2015 - Sep 2015

· Participated in the development of a global scale messaging product.

Awards

NSERC CGS D Scholarship, May 2022

Doctoral scholarship for \$105,000 awarded to highest-scoring PGS D applicants.

Mitacs Accelerate Grant, May 2017

Awarded funding for \$30,000 for an 8-month applied research project.

Community

· Referee for ICLR '23, NeurIPS '22, ICML '22, CVPR '22, ICCV '21.

Prog.

· Python (expert)

Languages

· Java, C, C++, C# (proficient)

· JavaScript, Swift, MATLAB, R (prior experience)

Tools

PyTorch, TensorFlow, Git, Apache Spark, Unity, Apache Beam