Mete Kemertas

Phone: +1 (647) 473-1993 Email: kemertas@cs.toronto.edu
Address: 1008-1080 Bay Street, Toronto, ON M5S 0A5

Education

University of Toronto
PhD · Computer Science · Sep 2020 - Present
· Focus in reinforcement learning and computer vision.

University of Toronto
MScAC · Computer Science · Sep 2016 - Dec 2017
· Focus in machine learning and natural language processing.

McGill University
B.Eng. · Electrical Engineering · 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

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.

Preprints

Trusted approximate policy iteration with bisimulation metrics.
M. Kemertas, A. Jepson.
URL https://arxiv.org/abs/2202.02881, 2022.

Patent Applications

· US17/072905 · Coarse-to-fine Multimodal Gallery Search System with Attention-based Neural Network Models
· US16/725717 · Feature Scrubbing: Anonymize Images on Home Devices
· 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 Intern (part-time) · Apr 2021 - Present
Senior Research Engineer · Mar 2020 - Sep 2020
Research Engineer · May 2018 - Mar 2020

· Research in machine learning and vision-language integration.
· Served as technical lead/co-lead for various research projects.
· Multiple publications at leading AI venues.
· 4 patent applications pending.

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 using multimodal representation learning.

Ormuco Inc. · *Montreal, QC*
Software Developer · May 2016 - Sep 2016

· Developed the backend of a notification and messaging system.
· Solved bugs in the backend of a cloud computing platform.
· Improved system performance by optimizing database queries and redesigning the caching system on the server side.

Ericsson · *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.

Prog. Languages

· **Python** (expert)
· **Java, C, C++, C#** (proficient)
· **JavaScript, Swift, MATLAB, R** (prior experience)

Tools

PyTorch, TensorFlow, keras, scikit-learn, pandas, Git, Apache Spark, Unity, Apache Beam, Android Studio, neo4j