

# Mete Kemertas

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## 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.  
· Worked as a research assistant at the Munk School of Global Affairs on applications of machine learning to macroeconomics research.

### 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

M. Kemertas, L. Pishdad, K. Derpanis, and A. Fazly.  
**RankMI: A mutual information maximizing ranking loss.** *CVPR*, 2020.

T. Capes, V. Raheja, M. Kemertas, and I. Mohomed.  
**Dynamic scheduling of MPI-based distributed deep learning training jobs.**  
*MLSys workshop at NeurIPS*, 2018.

## Patent Applications

· In Progress · An Efficient 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

## Awards

**Mitacs Accelerate Grant, May 2017**  
Awarded funding for \$30,000 for an 8-month applied research project.

Industry Experience	<b>Samsung AI Centre</b> · <i>Toronto, ON</i>
	<u>Senior Research Engineer</u> · Mar 2020 - Sep 2020
	<u>Research Engineer</u> · May 2018 - Mar 2020
	<ul style="list-style-type: none"> <li>· Conducted research in machine learning and vision-language integration.</li> <li>· Served as technical lead for various research projects.</li> <li>· Published a CVPR paper and a NeurIPS workshop paper.</li> <li>· 4 patent applications pending.</li> </ul>
	<b>Tealbook Inc.</b> · <i>Toronto, ON</i>
	<u>Machine Learning Engineer</u> · May 2017 - May 2018
	<ul style="list-style-type: none"> <li>· Removed significant data licensing costs by applying machine learning to produce a large database of the world's suppliers.</li> <li>· Designed and developed a recommendation engine for supplier discovery using multimodal representation learning.</li> </ul>
	<b>Ormucio Inc.</b> · <i>Montreal, QC</i>
	<u>Software Developer</u> · May 2016 - Sep 2016
	<ul style="list-style-type: none"> <li>· Developed the backend of a notification and messaging system.</li> <li>· Solved bugs in the backend of a cloud computing platform.</li> <li>· Improved system performance by optimizing database queries and redesigning the caching system on the server side.</li> </ul>
	<b>Ericsson</b> · <i>Montreal, QC</i>
	<u>Software Development Intern</u> · May 2015 - Sep 2015
	<ul style="list-style-type: none"> <li>· Participated in the development of a global scale messaging product.</li> </ul>
Prog. Languages	<ul style="list-style-type: none"> <li>· <b>Python</b> (expert)</li> <li>· <b>Java, C, C++, C#</b> (proficient)</li> <li>· <b>JavaScript, Swift, MATLAB, R</b> (prior experience)</li> </ul>
Tools	<b>PyTorch, TensorFlow, keras, scikit-learn, pandas, Git, Apache Spark, Unity, Apache Beam, Android Studio, neo4j</b>