

Mehran Shakerinava

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- EDUCATION ◇ **Ph.D. in Computer Science** 2021 – Now
Mila and McGill University, Montréal, Québec
Advised by Siamak Ravanbakhsh
GPA: 4/4
- ◇ **M.Sc. in Computer Science** 2020 – 2021
Mila and McGill University, Montréal, Québec
Advised by Siamak Ravanbakhsh
Fast-tracked to Ph.D.
- ◇ **B.Sc. in Computer Engineering** 2014 – 2019
Sharif University of Technology, Tehran, Iran
GPA: 17.41/20 (150 credits)
- RESEARCH ◇ Symmetry and equivariance in deep learning
INTERESTS ◇ Probabilistic and statistical approaches in machine learning
- PUBLICATIONS ◇ **M. Shakerinava**, A. K. Mondal, and S. Ravanbakhsh. “Structuring Representations using Geometric Invariants.” To appear in *Advances in Neural Information Processing Systems (NeurIPS)*, 2022.
- ◇ **M. Shakerinava**, and S. Ravanbakhsh. “Utility Theory for Sequential Decision Making.” *International Conference on Machine Learning (ICML)*. PMLR, 2022.
- ◇ **M. Shakerinava**, and S. Ravanbakhsh. “Equivariant networks for pixelized spheres.” *International Conference on Machine Learning (ICML)*. PMLR, 2021.
- ◇ M. Bakhshalipour, **M. Shakerinava**, F. Golshan, A. Ansari, P. Lotfi-Karman, and H. Sarbazi-Azad, “A Survey on Recent Hardware Data Prefetching Approaches with An Emphasis on Servers.” *arXiv preprint arXiv:2009.00715*, 2020.
- ◇ F. Golshan, M. Bakhshalipour, **M. Shakerinava**, A. Ansari, P. Lotfi-Kamran, and H. Sarbazi-Azad, “Harnessing Pairwise-Correlating Data Prefetching With Runahead Metadata.” *Computer Architecture Letters (CAL)*, 2020.
- ◇ M. Bakhshalipour, **M. Shakerinava**, P. Lotfi-Kamran, and H. Sarbazi-Azad, “Bingo Spatial Data Prefetcher.” *International Symposium on High-Performance Computer Architecture (HPCA)*, 2019.
- WORKSHOP ◇ **M. Shakerinava**, M. Bakhshalipour, P. Lotfi-Kamran, and H. Sarbazi-Azad, “Multi-Lookahead
PAPERS Offset Prefetching,” in *The Third Data Prefetching Championship (DPC3)*, in conjunction with *International Symposium on Computer Architecture (ISCA)*, 2019.
- ◇ M. Bakhshalipour, **M. Shakerinava**, P. Lotfi-Kamran, and H. Sarbazi-Azad, “Accurately and Maximally Prefetching Spatial Data Access Patterns with Bingo,” in *The Third Data Prefetching Championship (DPC3)*, in conjunction with *International Symposium on Computer Architecture (ISCA)*, 2019.

HONORS AND AWARDS	◇ Kharusi Family International Science Fellowship <i>McGill University</i> Valued at 7500\$	2020
	◇ 1st Place (among 30,000 participants) <i>Iran's National Master's Entrance Exam</i> Computer Engineering track, AI/Robotics major	2019
	◇ 2nd and 3rd Place (1st and 2nd Place in Multi-Core Setting) <i>The Third Data Prefetching Championship (DPC3) at ISCA 2019</i>	2019
	◇ 1st Place Programming Contest at Iran's 3rd Python Conference (<i>PyCon 2016</i>)	2016
	◇ Silver Medal (Ranked 15 among 10,000) <i>21st Iranian National Olympiad in Informatics</i>	2012
TEACHING EXPERIENCE	◇ Teaching Assistant <i>Fall 2022 - Theory of Computation</i> McGill University, Montreal, Canada Held office hours and graded assignments and exams.	
	◇ Teaching Assistant <i>Winter 2022 - Probabilistic Graphical Models</i> McGill University, Montreal, Canada Held office hours and graded assignments.	
	◇ Teaching Assistant <i>Spring 2018 and Spring 2019 - Artificial Intelligence</i> Sharif University of Technology, Tehran, Iran Designed and graded assignments. Held recitation classes for clarifying and solving assignments.	
	◇ Teaching Assistant <i>Fall 2016 - Advanced Programming</i> Sharif University of Technology, Tehran, Iran Held a recitation class. Designed and graded a quiz and a programming assignment.	
	◇ Instructor <i>Informatics Olympiad (2012 – 2015)</i> NODET High-School Taught topics on Combinatorics, Graph Theory, Algorithms, and Programming.	
SKILLS	◇ Assembly, C/C++, Java, Python, MATLAB, PyTorch, TensorFlow, CUDA, Git, Verilog, Arduino, HTML, CSS, JavaScript, Bash, L ^A T _E X	
PROFESSIONAL SERVICE	◇ Reviewer NeurIPS 2022, Montreal AI Symposium (MAIS) 2022.	
REFERENCES	◇ Siamak Ravanbakhsh (Advisor) Assistant Professor, School of Computer Science, McGill University siamak@cs.mcgill.ca	