

SEUNGCHAN KIM
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<https://seungchan-kim.github.io>

Education	Carnegie Mellon University <i>Ph.D. student at Robotics Institute</i>	Pittsburgh, Pennsylvania <i>Sep 2020 onwards</i>
	Brown University <i>M.S. in Computer Science (GPA: 4.0/4.0)</i> <i>B.S. in Applied Mathematics & Computer Science (GPA: 3.93/4.0)</i> <i>Advisors: George Konidaris & Michael Littman</i>	Providence, Rhode Island <i>Sep 2019 - May 2020</i> <i>Sep 2013 - May 2019</i>
Research Experience	Brown University Robotics Lab <ul style="list-style-type: none">Devised a new deep reinforcement learning algorithm using an alternative softmax operator.Proposed multi-step model-based RL algorithm to address compounding-error problem.Theoretically and empirically validated the efficiency of object-oriented partially observable Monte-Carlo planning algorithm.	Sep 2017 - May 2020
	Brown University Serre Lab <ul style="list-style-type: none">Modeled the memory-guided visual attention of children using Faster R-CNN.	Jan 2018 - May 2019
	ROK Army Signal Intelligence Research Lab <ul style="list-style-type: none">Decrypted navigational military signals, and managed signal database.	Sep 2015 - Jun 2017
Preprints	[5] Discovering Developmental Mechanisms of Memory-Guided Attention using Computer Vision Dima Amso, Lakshmi Narashimhan Govindarajan, Pankaj Gupta, Heidi Baumgartner, Andrew Lynn, Kelley Gunther, Diego Placido, Tarun Sharma, Vijay Veerabadrn, Kalpit Thakkar, Seungchan Kim , Thomas Serre. <i>Under Review</i> .	
	[4] Combating the Compounding-Error Problem with a Multi-step Model Kavosh Asadi, Dipendra Misra, Seungchan Kim , Michael Littman. <i>arXiv preprint. CoRR abs/1905.13320 [cs.LG]</i>	
Peer-Reviewed Publications	[3] Adaptive Temperature Tuning for Mellowmax in Deep Reinforcement Learning Seungchan Kim , George Konidaris. <i>Neural Information Processing Systems (NeurIPS) 2019 Deep RL Workshop.</i>	
	[2] DeepMellow: Removing the Need for a Target Network in Deep Q-Learning Seungchan Kim , Kavosh Asadi, Michael Littman, George Konidaris. <i>International Joint Conference on Artificial Intelligence (IJCAI) 2019.</i> Also at <i>Multidisciplinary Conference on Reinforcement Learning and Decision Making (RLDM) 2019.</i>	
	[1] Removing the Target Network from Deep Q-Networks with the Mellowmax Operator Seungchan Kim , Kavosh Asadi, Michael Littman, George Konidaris. <i>International Conference on Autonomous Agents and Multiagent Systems (AAMAS) 2019.</i>	
Invited Talk	An Alternative Softmax Operator for Deep Reinforcement Learning Machine Intelligence Community (MIC) Conference, Boston, MA.	Sep 2019
Teaching	Brown University Teaching Assistant CSCI1430 Computer Vision	Jan 2019 - May 2019
	CSCI0040 Intro to Scientific Computing and Problem Solving	Jan 2015 - May 2015

Academic Activities**Reviewer**

- ICML 2020
- NeurIPS 2019 Workshop on Machine Learning for Health
- NeurIPS 2019 Workshop on Machine Learning with Physical Sciences