

EDUCATION

- Georgia Institute of Technology** *Aug 2020 - Present*
Ph.D. in Machine Learning
Advised by Dhruv Batra and Zsolt Kira
- University of Southern California** *Aug 2016 - May 2020*
B.S. in Computer Science, Minor in Mathematics
Trustee Full Tuition Scholarship, GPA: 3.71 / 4.0

PUBLICATIONS

- A. Szot**, Y. Lee, S. Sun and J. J. Lim, "Goal-Driven Imitation Learning from Observation by Inferring Goal Proximity", in submission, 2020. [pdf]
- A. Jain*, **A. Szot*** and J. J. Lim, "Generalization to New Actions in Reinforcement Learning", in *International Conference on Machine Learning*, 2020. (* indicates equal contribution) [pdf]

EXPERIENCE

- MLP Lab and RIPL Lab, Georgia Institute of Technology** *August 2020 - Present*
Advisors: Prof. Dhruv Batra and Prof. Zsolt Kira
- Research on deep reinforcement learning for robotics.
- CLVR Lab, University of Southern California** *August 2018 - June 2020*
Advisor: Prof. Joseph J. Lim
- Developed a state of the art imitation from observation method.
 - Built reinforcement learning agents that can generalize to new actions.
 - Created novel benchmarks investigating tool usage and physical reasoning in RL. [web]
- Airbnb Software Engineering Intern** *May 2018 - August 2018*
- Deployed a model to production that predicted and took automated action against account takeover fraud using Scikit-learn, XGBoost, Hive and Presto.
 - Resulted in 50% reduction in account takeover fraud with minimal false positives.
- Media Communications Lab, University of Southern California** *October 2016 - December 2017*
Advisor: Prof. C.C. Jay Kuo
- Researched weakly supervised CNNs using clustering approaches to pre-train.
 - Ran experiments with TensorFlow, Cython and NumPy then presented results in research discussions.
- eBay Software Engineering Intern** *May 2017 - August 2017*
- Delivered a data analytics platform using Scala, Spark, Hadoop and Druid to process petabytes of eBay metrics.
 - Employed Spark MLlib unsupervised machine learning algorithms for customer group segmentation.

PROJECTS

- **CAIS++:** Co-founded a club, leading social impact AI projects. Received 200 applications per semester. Created teaching curriculum covering a semester of deep learning content. [web]
- **Voice Conversion:** Unsupervised voice translation between speakers. Received best project award out of 250 graduate students. Implemented CycleGAN and VQ-VAE for audio. [code] [write-up]
- **RL Algorithms:** Implemented and open sourced reinforcement and imitation learning methods. [code]

AWARDS

- **USC Viterbi Fellowship:** Research funding given to the top 20 engineering students per class. *2016-2020*
- **USC Trustee Scholarship:** Full tuition scholarship *2016-2020*
- **USC Provost Fellowship:** Merit based fellowship for summer research funding. *2019*