

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

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*