ASHLEY EDWARDS

Atlanta, GA • aedwards8@gatech.edu linkedin.com/in/aedwards8 • ashedwards.github.io

CAREER OBJECTIVE

I am interested in research involving reinforcement learning, robotics, and machine learning.

EDUCATION

Georgia Institute of Technology, Atlanta, GA

August 2011 - May 2019

- PhD in Computer Science: GPA 3.66
- Awarded 2012-2015 NSF Graduate Research Fellowship
- Awarded 2015-2016 Xerox Technical Minority Scholarship

University of Georgia, Athens, GA

August 2007 - May 2011

- Bachelor of Science in Computer Science: GPA 3.58
- Awarded HOPE Scholarship from 2007-2011

TECHNICAL SKILLS

Languages • Proficient in: Java, Python

• Experience with: C/C++, Matlab

Software & Technology • Platforms: Windows, Linux, OS X, Amazon EC2

• Libraries: OpenCV, Tensorflow

EXPERIENCE

Research Scientist Spring 2019 - Present

Uber AI Labs, San Francisco, CA

• Research in reinforcement learning

Software Engineering Intern

Summer 2017

Google Brain, Mountain View, CA

• Research within the Google Brain team

Software Engineering Intern

Summer 2016

Google Photos, Mountain View, CA

Research and Development within the Google Photos team

Graduate Research Assistant

August 2011 - Present

Georgia Institute of Technology, Atlanta, GA

• Research in Reinforcement Learning in Dr. Charles Isbell's "Lab for Interactive Machine Learning"

Graduate Teaching Assistant

Fall 2015

Georgia Institute of Technology, Atlanta, GA

• TA for Dr. Charles Isbell and Dr. Michael Littman's Graduate Level Reinforcement Learning Course at Udacity

NSF GROW Fellow Summer 2015

Waseda University, Tokyo, Japan

- Summer research intern in Dr. Atsuo Takanishi's research lab
- Developed Reinforcement Learning algorithm to train agents to learn behavior from videos without tracking features

Graduate Teaching Assistant

Fall 2012

Georgia Institute of Technology, Atlanta, GA

TA for Dr. Thad Starner's Graduate Level AI Class

Temp Operations Specialist

June 2011 - August 2011

CGI, Atlanta, GA

Added features and verified code fixes within software

NSF Funded Undergraduate Research

June 2010 - July 2010

Rutgers University, Piscataway, NJ

Developed Higher-Order Q-Learning in Dr. William Pottenger's research lab

Independent Study Spring 2010

University of Georgia, Athens, GA

• Studied multi-agent RL in Dr. Prashant Doshi's lab

NSF Funded Undergraduate Research

June 2009 - August 2009

University of Massachusetts, Amherst, MA

 Studied and implemented common reinforcement learning problems in Dr. Andy Barto's "Autonomous Learning Lab"

PUBLICATIONS

Edwards, A., Isbell, C. "Perceptual Values from Observation." In the *Workshop on Self-Supervised Learning*. California, USA, June 2019 (ICML workshop)

Edwards, A., Sahni, H., Schroecker, Y., Isbell, C. "Imitating Latent Policies from Observation." In the *Proceedings of the 36th International Conference on Machine Learning (ICML)*. California, USA, June 2019.

Edwards, A., Downs, L., Davidson, James. "Forward Backward Reinforcement Learning." In the *Machine Learning in Planning and Control of Robot Motion workshop*. Brisbane, Australia, May 2018 (ICRA workshop)

Edwards, A., Isbell, C. "Transferring Agent Behaviors from Videos via Motion GANs." In *Deep Reinforcement Learning Symposium*. California, USA, December 2017 (NIPS Symposium) Edwards, A., Hood, S., Isbell, C. "Cross-Domain Perceptual Rewards for Reinforcement Learning." In *The 3rd Multidisciplinary Conference on Reinforcement Learning and Decision Making*. Michigan, USA, June 2017

Edwards, A., Isbell, C., Takanishi, A. "Perceptual Reward Functions." In *Deep Reinforcement Learning: Frontiers and Challenges*. New York, USA, July 2016. (IJCAI Workshop)

Edwards, A., Littman, M., Isbell, C. "Expressing Tasks Robustly via Multiple Discount Factors." In *The 2nd Multidisciplinary Conference on Reinforcement Learning and Decision Making*. Edmonton, Canada. June 2015.

Edwards, A. and Pottenger, W. M. "Higher Order Q-Learning." In *IEEE Symposium on Adaptive Dynamic Programming and Reinforcement Learning*. Paris, France. April 2011.

INVITED TALKS AND TEACHING

"Learning Values and Policies from State Observations."	June 2019
Rework Deep Reinforcement Learning Summit	

"Q-Learning, Sarsa, and Monte Carlo Tree Search."	April 2016
Guest Lecture for Dr. Charles Isbell's Undergraduate Machine Learning Course.	

"Monte Carlo, Policy Iteration, and TD Methods".	April 2016
Guest lecture for Dr. Charles Isbell's Undergraduate Machine Learning Course.	

"Q-Learning and Sarsa."	April 2015
Guest Lecture for Dr. Charles Isbell's Undergraduate Machine Learning Course.	

"Higher Order Q-Learning."	February 2011
Presentation for Dr. Michael Littman's lab at Rutgers University.	

SERVICE

NeurIPS Reviewer	Summer 2019
Reviewer for ICML Workshop on Multi-Task and Lifelong RL	Spring 2019
ICML Reviewer	Winter 2019
Co-organized 1st Workshop on Goal Specifications for RL at ICML	Summer 2018
Reviewer for Exploration in RL workshop at ICML	Summer 2018
Reviewer for Black in AI Workshop	Fall 2017
Volunteer for SOCML	Fall 2017
Reviewer for Future of Interactive Learning Machines Workshop at NIPS	Fall 2016
Reviewer for NeurIPS	Summer 2016

Organized Robotics-RL reading group at Google Brain Volunteer for RLDM

Summer 2016 Summer 2015