

## EDUCATION

	Graduate Seminars		Grade
<b>Brown University</b> M.S. in Computer Science Class of 2020 4.0 GPA	CSCI 2951X: Reintegrating AI		A
	CSCI 2951F: Reinforcement Learning	Python	A
	CSCI 2950K: Deep Learning	TensorFlow	A
	CSCI 2951K: Topics in Grounded Language for Robotics	Java	A
<b>B.S. in Computer Science</b> Class of 2018 3.83 GPA	<b>Select Courses</b>		
	CSCI 1420: Machine Learning	Python	A
	CSCI 1951: Introduction to Robotics	ROS	A
	CSCI 1570: Design and Analysis of Algorithms	Matlab	A
	APMA 1710: Information Theory		A

## EXPERIENCE

<b>Microsoft Research</b> Research Predoc	<ul style="list-style-type: none"><li>Wrote a paper accepted to ICLR 2020 as first author (<a href="https://tinyurl.com/AMRL-ICLR">tinyurl.com/AMRL-ICLR</a>)</li><li>Researched long-term memory in deep RL with Katja Hofmann</li><li>Showed the sensitivity of modern memory approaches to stochasticity</li><li>Implemented DNC and improved over it by 9%</li></ul>	Spring-Summer 2019
<b>Michael Littman's Car Lab</b> Researcher	<ul style="list-style-type: none"><li>Published a paper in the International Conference on Social Robotics 2019, using Stackelberg game trees (<a href="https://tinyurl.com/Bully-ICSR">tinyurl.com/Bully-ICSR</a>)</li><li>Leading research on learning from demonstration with human feedback without exploration (early work: <a href="https://arxiv.org/abs/1901.05101">arxiv.org/abs/1901.05101</a>, publicity: <a href="https://tinyurl.com/PubAV">tinyurl.com/PubAV</a>)</li><li>Created DQN to plan actions for an autonomous car in a Unity simulator</li></ul>	2017-2019
<b>DeepScale</b> R&D Intern	<ul style="list-style-type: none"><li>Created state-of-the-art methods for lane instance segmentation using PyTorch</li><li>Developed heuristic, cluster-based, and end-to-end approaches</li><li>Made use of bilinear upsampling and shuffle net encoder to reduce FLOPS</li></ul>	Fall 2018
<b>Lyft</b> Software Engineer Intern	<ul style="list-style-type: none"><li>Worked on behavioral planning at the Level5 autonomous vehicle lab</li><li>Simulated human agents with learnable parameters at a stop intersection in C++</li><li>Coded an MDP to find a policy for AV at a stop intersection, given the human model</li><li>Created a Python MDP framework, including a special-case solver</li></ul>	Summer 2018
<b>Brown University</b> Deep Learning TA	<ul style="list-style-type: none"><li>Designed, taught, graded material for the graduate deep learning course CSCI 2470</li><li>Gave a lecture on implementing sequence-to-sequence translation with attention</li><li>Designed a lab on recurrent neural nets including vanilla RNN's, GRU's, and LSTM's</li></ul>	Fall 2017
<b>Adobe</b> Data Science Intern	<ul style="list-style-type: none"><li>Improved forecasting for the Data Science Digital Marketing research team</li><li>Set up the models to re-train online as new data comes in (concurrently)</li><li>Improved team's prediction accuracy by 9%, with only 121 samples per model</li></ul>	Summer 2017
<b>Food with Friends</b> Co-founder & Developer	<ul style="list-style-type: none"><li>Co-founded, designed, and developed Food with Friends in Swift on iOS app store</li><li>Implemented multithreading, Google maps API, and user management</li></ul>	Summer 2016
<b>Pied Piper Robotics LLC</b> Engineering Intern	<ul style="list-style-type: none"><li>Designed, 3D printed, programmed, and wired a robot head and neck, using SketchUp and ROS</li></ul>	Summer 2015

## PROJECTS

<b>Neural Mesh</b> Lead	Designed, implemented, and benchmarked a biologically inspired RNN (project report: <a href="https://arxiv.org/abs/1807.11121">arxiv.org/abs/1807.11121</a> )	Spring 2018
<b>Drone</b> Alone	Built and programmed a quadcopter to do position and velocity hold with PID controllers and optical flow, using ROS	Fall 2017
<b>Learning Atari with ACKTR</b> 5-person team	Implemented state-of-the-art ACKTR (Actor-Critic using Kronecker-Factored Trust Region) model to learn Atari, for an RL grad seminar	Fall 2017
<b>GAN Image Completion</b> 4-person team	Built a GAN to complete corrupted images in TensorFlow, for a deep learning grad seminar	Fall 2016
<b>RL with Emotive Feedback</b> 2-person team	Coded an agent in Minecraft using reinforcement learning and OpenCV, for a robotics grad seminar	Spring 2016