NEEV PARIKH

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EXPERIENCE

Research Assistant

Intelligent Robot Lab

Jun 2020 – Present | Providence, RI

- Working on Reinforcement Learning/Robotics research, advised by **Prof. George Konidaris**.
- New mathematical framework (LOMDPs) for robot domains
- Unsupervised representation learning for improving RL
- Graph-based priors for improving multi-task and RL performance

Machine Learning Intern

Myelin Foundry

Jun 2019 – Aug 2019 | Bangalore, India

- Developed a cutting-edge, deep-learning based pipeline in Pytorch and Tensorflow to augment VFX workflows for a POC product.
- Researched and managed a company-wide, cloud-compute platform, reducing potential monthly costs by 70%.
- Helped transition MLOps to Microsoft Azure.
- Implemented DeepLabv3+ from **ECCV 2018** to develop SOTA pipelines for semantic segmentation tasks.
- Achieved 90% in business-aligned metrics with reasonable inference time.

Software Engineering Intern

Scripbox

Jul 2018 – Aug 2018 | Bangalore, India

- Developed integrated data visualization tool in Typescript with ReactJS.
- Researched RFM analysis to gather business insights using Python.

Teaching Assistant

Brown University

Sep 2019 – May 2020 | Providence, RI

- CSCI 1430 - Computer Vision (Prof. James Tompkin)
- CSCI 2951F - Introduction to RL (Prof. Michael Littman)

PUBLICATIONS

*equal contribution

- N. Parikh*, Z. Horvitz*, N. Srinvasan*, A. Shah, and G. Konidaris (Oct. 2020). “Graph Embedding Priors for Multi-task Deep Reinforcement Learning”. In: *NeurIPS 2020. KR2ML Workshop*.
- C. Allen, N. Parikh, and G. Konidaris (Oct. 2020). “Learning Markov State Abstractions for Deep Reinforcement Learning”. In: *NeurIPS 2020. Workshop on Deep Reinforcement Learning*.
- K. Asadi, N. Parikh, R. Parr, G. Konidaris, and M. Littman (Sept. 2020). “Deep Radial-Basis Value Functions for Continuous Control”. In: *Under review*.
- M. Merlin, N. Parikh, E. Rosen, and G. Konidaris (May 2020). “Locally Observable Markov Decision Process”. In: *International Conference on Robotics and Automation. Workshop on Perception, Action, Learning*.

EDUCATION

B.Sc. in Computer Science

Brown University

Aug 2018 – May 2022

GPA: 3.9

Advised by: **Prof. Michael Littman**

Graduate Courses

ML with Limited Labeled Data | Reintegrating AI | Prescriptive Analytics | ML Theory Seminar | Intro to RL (IS)

Undergraduate Courses

Distributed Systems | Computer Vision | Accelerated Intro CS | Intro to Systems | Linear Algebra | Convex Optimization | Probability & Statistics | Microeconomics | Honors Multivariable Calc. | Algorithms

PROJECTS

Onager

Lightweight hyperparameter tuning and experiment management, with interfaces to Slurm and Gridengine clusters

camall3n/onager

SKILLS

Python | Golang | C | Tensorflow | Pytorch | Numpy | Machine Learning | Slurm | Gridengine | AWS | Azure | Google Cloud | Docker | Git | Haskell

AWARDS

2nd place – Brown Datathon

Developed a U-Net style CNN model to perform neuron cell segmentation on fruit fly and mouse brains.

rgreenblatt/brown-datathon

Stripe Sponser Prize – HackPrinceton

Developed a gun violence awareness tool integrating live data visualization and machine learning predictions.

neevparikh/hack-princeton-brown