SRIDHAR THIAGARAJAN

www.linkedin.com/in/sridhartee — https://sritee.github.io/

`www.github.com/sritee` ⋄ thiagars@oregonstate.edu , +1-5419083285

SUMMARY

Motivated robotics graduate student with over three years of experience in machine learning, reinforcement learning and controls. I am currently looking for a challenging Summer 2019 internship.

EDUCATION

M.S in Robotics, Oregon State University *Sept 2018-20*
Autonomous Agents and Multiagent Systems, Large Scale Optimization, Intro. to Robotics

Bachelor of Engineering, Anna University CGPA- (8.31/10) *May 2018*

TECHNICAL SKILLS

- Programming: Python, C++, MATLAB
- Solvers/Libraries/Software: CVX, TensorFlow, ROS, OpenCV, Git, Gazebo
- Self Study: Bishop's Pattern Recognition and Machine Learning, Convex Optimization by Stephen Boyd, Richard Sutton's Introduction to RL, Stephen Abbott's Understanding Real Analysis

EXPERIENCE

Personal Robotics Lab, Oregon State University Oct 2018-Ongoing
Graduate Researcher

· Developing action planners for finite horizon probabilistic setting. Goal is to bound worst case loss, rather than minimizing expected cost. Application domain is an Ebola quarantine centre.

IIIT Delhi May 2017 - Oct 2017
Machine Learning Intern [Poster]

· Designed and evaluated RL based adaptive traffic light controllers which were found to be an improvement of over 21 percent when compared to a non-intelligent controller.
· Implemented one shot imitation learning algorithms in Tensorflow for egocentric view based control.

Swaayatt Robots Dec 2016 - Feb 2017
Reinforcement Learning for Autonomous Driving

· Designed and tested off-policy, model-free reinforcement learning methods for steering control of an autonomous vehicle. Trajectories to be followed were detected with a CNN trained to 97% test error.

ACADEMIC PROJECTS (SELECTED)

- Autonomous Overtaking using Reinforcement Learning [Report]
  - Implemented several research papers in options framework, a temporal abstractions framework and designed a PyGame simulator to test a proposed framework for autonomous driving.

- Convex Optimization Solver [Code]
  - Built a generic interior point method based convex optimization solver in MATLAB.

- Autonomous Beach Cleaning Robot [Video]
  - Led team of three which developed an autonomous beach cleaning robot. My role was in team organization, ML for litter detection, and prototype design.