

## Education

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<b>PhD, Computer Science and Engineering, University of Washington</b> Advisor: Dr. Siddhartha S. Srinivasa	2017 – Present
<b>MS, Robotics, Carnegie Mellon University [Transferred to UW]</b> Advisor: Dr. Siddhartha S. Srinivasa	2016 – 2017
<b>B.Tech, Mechanical Engineering, Indian Institute of Technology Madras</b> Advisor: Dr. Arun D. Mahindrakar	2012 – 2016

## Experience

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<b>Personal Robotics Laboratory</b> University of Washington With a research interest that lies at the intersection of planning and learning, I work on search-based geometric motion planning and decision-making under uncertainty in application to robotics.	Graduate Research Assistant 2017 – Present
<b>Personal Robotics Laboratory</b> Carnegie Mellon University Studied the application of double quaternions for solving the inverse kinematics of high DoF robot manipulators, specifically the Kinova Jaco.	Graduate Research Assistant 2016 – 2017
<b>Dynamics and Control Laboratory</b> Indian Institute of Technology, Madras My Bachelor's Thesis investigated the application of the Leapfrog algorithm and Pontryagin's Maximum Principle to generate time, distance, and fuel optimal trajectories for mobile robots.	Undergraduate Research Assistant 2015 – 2016
<b>Systemantics India Pvt. Ltd.</b> Bangalore Modelled the dynamics of a hybrid manipulator Modelled the dynamics of a hybrid manipulator for trajectory tracking and control in performing industry-precision manipulation tasks.	Summer Research Intern 2014 – 2015
<b>Raftar Formula Racing</b> Indian Institute of Technology Madras Designed and manufactured the suspension system of a Formula-style racecar for Formula Student Combustion (FSC) Germany, 2014.	Vehicle Dynamics Engineer 2013 – 2014

## Publications

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- P1 **Bayesian Policy Optimization for Model Uncertainty**, G. Lee, B. Hou, A. Mandalika, J. Lee and S.S. Srinivasa. *arXiv preprint*, arXiv:1810.01014, 2018.
- C1 **Lazy Receding Horizon A\* for Efficient Path Planning in Graphs with Expensive-to-Evaluate Edges**, A. Mandalika, O. Salzman and S.S. Srinivasa. In *International Conference on Automated Planning and Scheduling (ICAPS)*, 2018.
- C2 **Numerical and Experimental Implementation of Leapfrog Algorithm for Optimal Control of a Mobile Robot**, A. Vamsikrishna, Arun D. Mahindrakar and Shaligram Tiwary. In *International Control Conference (ICC)*, 2017.

## Teaching and Invited Talks

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<b>Graduate Teaching Assistant, University of Washington</b> Advanced Robotics: Manipulation Algorithms	Fall 2017
<b>Guest Lectures, Lakeside High School, Seattle</b> Introduction to Robotics	Fall 2017

## Technical Skills

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**Languages:** C, C++, Python, MATLAB, L<sup>A</sup>T<sub>E</sub>X

**Libraries and Tools:** ROS, OMPL, OpenCV