

Sean J. Wang

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EDUCATION	<i>PhD, Mechanical Engineering</i> Carnegie Mellon University GPA: 4.0	2018 - Present
	<i>BS/MS, Mechanical Engineering</i> University of California, Santa Barbara BS Major GPA: 3.97 MS GPA: 4.0	2013 - 2018
HONORS & AWARDS	TCS Presidential Fellowship	2018 - 2019
	Tirrell Award for Distinction in Undergraduate Research	2017
	UCSB Junior Design Fair - Most Marketable Product	2016
	1st Place, UCSB Robotics: Design RoboRat Competition	2015
PROJECTS	<i>Autonomous Rough Terrain Traversal</i> Developing sample efficient reinforcement learning algorithms and wheeled robots for rough terrain traversal	2019 - Present
	<i>Environmental Sampling Robot</i> Developing an autonomous robot to measure contaminants in remote locations to assess contaminant distribution of the environment for future remediation.	2019 - Present
	<i>Contact Localization for Transparent Robots</i> Developed a method for transparent robots to localize contact points between itself and foreign objects.	2018-2019
	<i>Advanced Imaging Drone</i> Modified an unmanned aerial system allowing it to fly through forest canopy environments to locate endangered birds.	2016 - 2017
	<i>Cloud-Supported Coverage Control for Persistent Surveillance Missions</i> Created coverage control algorithms for networks of autonomous mobile sensors.	2016
	<i>Remote Bike Lock Design</i> Designed and built a prototype remote controlled bike lock with locating features which won "Most Marketable Product" at the UCSB Junior Design Fair.	2016
	<i>RoboRat Design</i> Designed and built a robot capable of autonomously navigating a course, picking up foam blocks, and stacking them on a wall	2015
TEACHING EXPERIENCE	<i>24-352 (Dynamics, Systems & Controls) TA</i> Carnegie Mellon University	2020

<i>ME 10 (Graphic, CAD & Design) TA</i> University of California, Santa Barbara	2018
<i>ME 156B (Mech. Eng. Design II) TA</i> University of California, Santa Barbara	2018
<i>ME 156A (Mech. Eng. Design I) TA</i> University of California, Santa Barbara	2017
<i>ME 155A (Control System Design) Reader</i> University of California, Santa Barbara	2017
<i>ME 179P (Robotics: Planning) Reader</i> University of California, Santa Barbara	2016
<i>ME 179L (Robotics: Design) Reader</i> University of California, Santa Barbara	2016

INDUSTRY EXPERIENCE

<i>Mechanical Engineer Intern</i> Strand Products, Inc.	2017
<i>Mechanical Engineer Intern</i> Continental Advanced Lidar Solutions US, Inc.	2016

PUBLICATIONS

1. Sean J. Wang, Ankit Bhatia, Matthew T. Mason, and Aaron M. Johnson. Contact localization using velocity constraints. In *Proceedings of the IEEE/RSJ Intl. Conference on Intelligent Robots and Systems*, Las Vegas, NV, Oct. 2020. To appear
2. Sean J. Wang, Ankit Bhatia, Matt T. Mason, and Aaron M. Johnson. Contact localization for transparent robots using velocity constraints. In *Dynamic Walking*, May 2020
3. Letong Wang, Sean Wang, and Aaron M. Johnson. Traversability analysis for highly maneuverable wheeled robots. Technical report, CMU Robotics Institute Summer Scholars Working Papers Journal, 2019
4. Jeffrey R Peters, Sean J Wang, and Francesco Bullo. Coverage control with anytime updates for persistent surveillance missions. In *2017 American Control Conference (ACC)*, pages 265–270. IEEE, 2017
5. Jeffrey R Peters, Sean J Wang, Amit Surana, and Francesco Bullo. Cloud-supported coverage control for persistent surveillance missions. *Journal of Dynamic Systems, Measurement, and Control*, 139(8), 2017