

MARK JENNINGS

markjennings97@gmail.com

www.makr.org

Education – The University of Texas at Austin

MS Mechanical Engineering	2019 – Present
----------------------------------	-----------------------

Dynamic Systems and Control, 3.95 GPA

BS Mechanical Engineering	2015 – 2019
----------------------------------	--------------------

Robotics Certificate Program, 3.84 GPA

Research Experience

Nuclear & Applied Robotics Group	2019 – Present
---	-----------------------

Graduate Research Assistant

- Develop real-time controls for passively-balanced robotic arm
- Implement collaborative manufacturing and confined manipulation tasks

Rehabilitation and Neuromuscular (ReNeu) Robotics Lab	2016 – 2019
--	--------------------

Undergraduate Research Assistant

- Designed and manufactured parts for rehabilitation robots
- 3D printed and assembled prosthetic hand and prosthetic finger

Work Experience

Sandia National Labs	Summer 2019
-----------------------------	--------------------

R&D Intern

- Proposed qualification procedure for additively manufactured metal parts
- Designed electronics housing and validated through mechanical testing
- Awarded first out of three teams in summer design challenge

Apptronik Systems	Summer 2018
--------------------------	--------------------

Engineering Intern

- Fabricated mechanical parts for lower-body powered exoskeleton
- Designed and validated actuator testbed product
- Developed forward kinematics for 10 DoF bipedal robot

Leadership Experience

Capstone Engineering Project	Spring 2019
-------------------------------------	--------------------

Engineering Lead

- Collaborated with 3 other seniors to redesign a feedstock hopper for an SLS printer
- Delivered final prototype with significantly improved powder retention and distribution

UT Robotics & Automation Society (RAS)	2015 – 2019
---	--------------------

Mentor, Officer

- Assisted in community outreach events to introduce youth to robotics
- Mentored 3 teams of 5-6 students in annual robotics competition

Technical Skills

	<i>Proficient</i>	<i>Familiar</i>
Software	SolidWorks, MATLAB, MS Office	PTC Creo, LabVIEW
Programming	C++, Robot Operating System (ROS), Linux	Python, HTML, CSS
Algorithms	Manipulator control, Mobile robot localization	LiDAR SLAM, Point Set Registration
Fabrication	Manual machining, Additive manufacturing	CNC operation, CAM software