MARK JENNINGS

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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

	Proficient	*Familiar*
Programming	C++, Robot Operating System (ROS), Linux	Python, MoveIt
Software	SolidWorks, MATLAB, MS Office	PTC Creo, LabVIEW
Algorithms	Manipulator control, Obstacle avoidance	SLAM, Point set registration
Fabrication	Manual machining, Additive manufacturing	CNC operation