

# KEVIN YU

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## ***Objective - Seeking full-time job opportunity***

### **EDUCATION**

<b>The University of Texas at Austin</b>	BS, Mechanical Engineering; Manufacturing and Design; GPA 3.30	2015-2019
<b>Relevant Courses Taken</b>	Mechanics of Solids, Fluid Mechanics, Thermodynamics, Physics, Statics, Dynamics, Heat Transfer, Materials Engineering, Software Design, Engineering Statistics, Engineering Graphics and Design, Failure Analysis, Medical Device Design	

### **PROFESSIONAL CERTIFICATE/PUBLICATION**

• Certified SOLIDWORKS Associate for Mechanical Design by Dassault Systèmes SOLIDWORKS Corp	2016
• Fundamentals of Engineering (FE) exam by National Council of Examiners for Engineering and Surveying (NCEES)	2019
• An Individual-specific, Affordable, Robotic Gait Trainer for People with Neurological Injury, Sung Yul Shin	2017

### **WORK EXPERIENCE**

<b>HP Inc. – Capstone Senior Design Project; Houston, TX</b>	08/2019 – Present
• Designed and developed laptop measuring fixture using optomechanical system with microns accuracy	
• Utilized computer vision and edge detection to find and measure object edges to desired tolerance	
• Integrated and built specifications for purchasing linear encoders and linear actuator system	
<b>SHINE Medical – Process Engineering Intern; Janesville, WI</b>	05/2018 – 08/2018
• Developed the SHINE Medical manufacturing process to produce cancer treatment elements for nuclear medicine	
• Utilized SolidWorks to support the modal analysis of Neutron Driver Assembly System (NDAS)	
• Modeled SuperCell pressure vessels in SolidWorks using SolidWorks Weldments and Sheet Metal	
<b>NASA Johnson Space Center – Advanced Thermal Technology Intern; Houston, TX</b>	01/2018 – 05/2018
• Spearheaded the development and design of the Fusible Heat Sink test article to evaluate the efficiency of a Phase Change Material Heat Exchanger (PCM HX) for Lunar Orbital Platform-Gateway (LOP-G)	
• Worked with Habitable Airlock Module team and machinist to manage and reduce test article budget and fabrication time	
• Presented and defended Fusible Heat Sink test article design during design reviews with upper management to raise funding for the Fusible Heat Sink test article	
<b>PneumRx, Inc/BTG Company – R&amp;D Engineering Intern; Santa Clara, CA</b>	06/2017 – 08/2017
• Conducted research on the Lung Volume Reduction Coil System, a Class III Nitinol implantable medical device to treat patients with severe emphysema and COPD	
• Utilized LabView to analyze data from force transducers and power stepper motors for trackability tests	
• Designed fixtures in SolidWorks for the trackability testers using a mill and lathe and documented trackability test method	
• Trained on FMEA and FDA risk analysis methods and SolidWorks PDM	
<b>ReWire Laboratory, University of Texas at Austin – Lab Researcher; Austin, TX</b>	06/2016 – 12/2017
• Created SolidWorks FEA simulations of flexure sensors for a device to help stroke patients regain motor control	
• Utilized fatigue studies, design studies, and design tables to calibrate a sensitive flexure sensor	
• Constructed a Jansen Mechanism for stroke rehabilitation and prototyped aluminum linkage designs	
• Presented research results at a biomechanics convention, collaborators including UT Austin and St. David's Medical Center	
<b>Microbiomechanics Laboratory, University of California Irvine – Lab Researcher; Irvine, CA</b>	07/2014, 06-07/2015, 01/2016
• Created SolidWorks animations and models of a self-diagnostic mobile device for malaria disease	

### **EXTRACURRICULAR ACTIVITIES & HONORS**

• Powerlifting Team, Judo Team, and Brazilian Jiu Jitsu Team, University of Texas at Austin	08/2016 - Present
1st place in Gi and No Gi Longhorn Tournament. Competed and volunteered at collegiate powerlifting meets.	

### **ADDITIONAL INFORMATION**

**Skills:** Python, SolidWorks, MATLAB, Creo, Geometric Dimensioning and tolerancing (GD&T), CNC Machining, Lathe and Mill, DFM and DFA, Rapid Prototyping, Finite Element Analysis (FEA), Medical device design, FMEA, Simscape, Mechanical Design