## **KEVIN YU**

• (949) 325-5775 • keviny14@utexas.edu • Citizenship: U.S.

Portfolio: https://kevinyusite.wordpress.com/; LinkedIn: https://www.linkedin.com/in/kevin-yu-b796b2128/

# Objective - Seeking full-time job opportunity

#### **EDUCATION**

The University of Texas at AustinBS, Mechanical Engineering; Manufacturing and Design; GPA 3.302015-2019Relevant Courses TakenMechanics of Solids, Fluid Mechanics, Thermodynamics, Physics, Statics, Dynamics,<br/>Heat Transfer, Materials Engineering, Software Design, Engineering Statistics,<br/>Engineering Graphics and Design, Failure Analysis, Medical Device Design

#### PROFESSIONAL CERTIFICATE/PUBLICATION

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• 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**

HP Inc. - Capstone Senior Design Project; Houston, TX

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

### SHINE Medical – Process Engineering Intern; Janesville, WI

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

# NASA Johnson Space Center – Advanced Thermal Technology Intern; Houston, TX

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

## PneumRx, Inc/BTG Company – R&D Engineering Intern; Santa Clara, CA

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

## **ReWire Laboratory, University of Texas at Austin** – Lab Researcher; Austin, TX

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

Microbiomechanics Laboratory, University of California Irvine – Lab Researcher; Irvine, CA 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