# **KEVIN YU**

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# Objective - Seeking Full-Time Job Opportunity

## **EDUCATION**

**The University of Texas at Austin** BS, Mechanical Engineering; GPA 3.24

2015-2019

Relevant Courses Taken Mechanics of Solids, Fluid Mechanics, Thermodynamics, Statics, Dynamic

Systems and Controls, Dynamics, Heat Transfer, Material Selection, Machine Tool Operations, Design Methodology, Mechatronics

### PROFESSIONAL CERTIFICATE

• Certified SOLIDWORKS Associate for Mechanical Design by Dassault Systèmes SOLIDWORKS Corp

02/2016

#### WORK EXPERIENCE

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)
- Redesigned and updated the Extraction Hot Cell piping and equipment layout in collaboration with nuclear safety engineers
- 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

- Applied heat transfer, fluid mechanics, and thermodynamic principles to resolve space exploration problems
- 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 HAL 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
- Used Creo to develop life scale mockup of Fusible Heat Sink on Habitable Airlock Module (HAL)

# PneumRx, Inc/BTG Company – Summer 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, tracking pressure of guidewires and forceps through clinically observed, worst case torturous pathways
- 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
- Collaborated and brainstormed with R&D team to reduce operation time and procedure difficulty

### **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 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**

• Longhorn Powerlifting, UT Brazilian Jiu-Jitsu, UT Judo, University of Texas at Austin

08/2016 - Present

1st place in Gi and No Gi at Longhorn Open Tournament, Trained 12 hours a week, competed and volunteered at meets.

## **ADDITIONAL INFORMATION**

**Computer Skills:** Java, Python, SolidWorks, LabVIEW, MATLAB, Creo, CNC machining, Lathe and Mill machining, DFM, Additive manufacturing, Drawing generation, Prototyping, SolidWorks FEA, GD&T

Languages: Native English; Citizenship: United States