ALEXANDER KAISER

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EDUCATION

Bachelor of Science, Mechanical Engineering May 2018
University at Buffalo, The State University of New York **GPA: 3.6/4.0**

RELEVANT EXPERIENCE

RICH PRODUCTS CORPORATION

Mechanical Engineer Intern January 2018 - Present

- Draft precise models of concepts utilizing Solidworks
- Prototype functioning models using additive manufacturing techniques
- Validate designs by conducting testing to pinpoint optimal strategies

KAISER ENGINEERING

Design Engineer August 2017 - Present

- Brainstorming early stage enclosure/mounting designs to be pursued
- Developing 3D models of automotive gauge clusters utilizing Creo 4.0 and Solidworks
- Prototype various designs using additive manufacturing techniques and CNC machining

JOHN W. DANFORTH COMPANY

Project Manager / Estimator Intern May 2015 – January 2018

- Organized meetings with subcontractors, vendors, and gov't agencies to coordinate tasks
- Drafted estimates for jobs using AutoBid software
- Analyzed technical drawings of floor plans to influence design decisions

ENGINEERING LEADERSHIP

UB ROBOTICS, Intelligent Ground Vehicle Competition Fall 2017

Lead Mechanical Engineer

- Lead the creation of 3D model using Solidworks and Creo Parametric
- Reverse engineered previous designs
- Test various navigation sensors such as LIDAR and GPS to automate the vehicle

UB AIAA, Design Build Fly Competition Fall 2017

- Design 3D model in SolidWorks so that various parts can be laser printed
- Construct several prototypes, and improve design through each iteration
- Develop substantial documentation to verify design decisions

COURSE PROJECTS

Product Design in CAE Environment Fall 2016

BMP America Adjustable Packing Tool

- Conducted FEA on components using Creo 3.0 to understand behavior of design under use
- Utilized Geometric Dimensioning and Tolerancing skills to accurately convey design constraints

Machines and Mechanisms

Wood Splitter Analysis Spring 2016

- Performed Finite element analysis using Matlab to define weak points of design
- Evaluated estimated lifecycle of existing design, then modified design to increase lifespan

SKILLS

- CAD Software: Solidworks, Creo Parametric, and Autodesk Inventor
- Computational Simulation: Matlab, Simulink, and Finite element analysis (FEA)
- Programming: Beginner in Arduino, C++, and Python
- Microsoft Software: Excel, Word, PowerPoint, OneNote, Project
- Understanding of additive manufacturing methods, advantages, and limitations
- General knowledge of Geometric Dimensioning and Tolerancing (GD&T)