George Sturges
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Professional Overview

Aspiring junior in Mechanical Engineering with experience in automotive development and group-based design projects. Highly adaptable to challenges with quickly developing technical skills and rigorous educational pursuits.

Education

Lehigh University, Bethlehem, PA — Anticipated May 2020
Bachelor of Science in Mechanical Engineering with a Minor in Materials Science, 3.64 cumulative GPA

Portsmouth Abbey School, Portsmouth, RI — Graduated May 2016
High School Diploma, 3.9 cumulative GPA

Relevant Coursework

Heat Transfer, Renewable Energy, Thin Films, Mechanical Elements, Intro to Aerospace Engineering, Dynamics, Strength of Materials, Physical Properties of Materials, Fluid Mechanics, Thermodynamics I, Fundamentals of Engineering Mechanics, Graphics for Engineering Design, Engineering Materials and Processes, Linear Methods, Calculus I, II, & III, Physics I & II

Project-Based Experience

Formula SAE, *Lehigh University* — Fall 2016-2019

- Developed technical skill with 3D modelling in Solidworks and manual machining
- Competed for two years at FSAE Michigan, consisting of dynamic events and cost/design presentation
  - Worked in two-person team to develop complete thermal simulation for brake rotor
  - Created new rotor design to save weight and improve simulation data
  - Team placed 73rd out of 118 overall teams
- Currently working on chassis evolution in two-person subteam under lead designer

Thermal Analysis of a Composter, *Lehigh University* — Fall 2018

- Worked in 4-person teams to optimize performance of an existing composter design
- Gathered and used data to develop an analytical model of temperature distribution
- Created an analytical model to evaluate heat generation and dissipation
- Summarized findings and proposed design improvements in report to professor

Vice Modelling and Production Drawing, *Lehigh University* — Fall 2017

- Used SolidWorks to produce 3d model and associated production drawings of a vice
  - Includes exploded assembly view, section views, part multiviews, GD&T annotations, as well as notes on screw threading, cylindrical fits, and surface finishes

Double-Decker Flying Chairs Design, *Lehigh University* — Fall 2017

- Worked in teams of six students to design a two-tiered flying chairs amusement park ride
- Designed truss support systems for second-level floor and roof, and used Excel to model the stress in the support columns as personal contribution to project
- Collated final design and discussed methodology in final report to professor

Skills

Solidworks, CREO parametric, MATLAB, MS Office, ANSYS Workbench, Adobe Reader Pro, Automotive and Machine Shop Tools

Work Experience

Raytheon, Mechanical Engineering Intern. *Portsmouth RI* — Summer 2018

- Drafted assembly and test instructions for facility communication systems of new contract
- Designed, prototyped, and produced manufacturing aids to improve system assembly time
- Worked extensively with company and industry standards (MIL SPEC)
- Completed a Six Sigma project with one other intern to assist 3D printing initiative

The Carnegie Abbey Club, Caddie. *Portsmouth RI* — Summer 2013-2017

- Caddied for members and guests of the club
- Assisted golfers' experiences through carrying golf bags and providing advice