

Jon Collegeman

Highly motivated, enthusiastic, and analytical mechanical engineering student, with proven technical experience and excellent communication skills. Capable of learning new processes, highly inquisitive, and research-oriented, with the capability to devise new solutions with extreme attention to detail.

Education

Southern University

GPA: 3.08/4.00

Bachelor of Science in Mechanical Engineering

Expected Graduation: December 2018

Work Experience

Convenience store

2013-2016

Customer Service & Sales

- Demonstrated excellent customer assistance and communication skills in dealing with over 500 customers a day on average.
- Taught and oversaw new hire's essential duties such as cashiering, stocking, and store maintenance.

Tutoring Center

2012-2013

Mathematics and Physics tutor

- Taught calculus, geometry, algebra, and physics to students grades 7-12.
- Prepared over 30 students for AP and ACT tests by administering and grading practice exams, problems, and essays over the course of 8 months.

Extracurricular Experience

Solar Car Project

2015-2016

Mechanical Engineering team member

- Designed and tested components for array attachment mechanism for solar powered car using Inventor.
- Recreated Inventor drawings of chassis components in Solidworks for simulation purposes.

CubeSat Club

2016-2017

Orbit and Navigational team lead

- Led a team to design and test a tracking system for a small satellite, using the radio communication system to transmit location and orbital data to the approximate orbit.
- Performed vibrational stress testing on chassis using FEA in Inventor.

Laboratory Projects

Interactions of Gamma Rays with Matter, Modern Physics Lab

2016

- Worked in group of 4 students to observe the effects of gamma rays interacting with matter using radioactive sources, a photomultiplier, and a photocathode.
- Derived equations for photon energies and gamma ray intensity.
- Used error analysis to calculate uncertainty of values from derived equations in all subsequent labs.

Measurement of carbon film using Particle Accelerator, Modern Physics Lab

2016

- Worked in class of 25 students to operate Particle Accelerator in order to find the thickness of carbon foil.
- Aimed proton beam and aligned carbon foil sheet before activating accelerator
- Calculated the number of particles scattered at a specific angle by deriving equations based on Rutherford's gold foil experiment

Technical Skills

- Intermediate experience designing components in AutoCAD, Inventor, and Solidworks
- Proficient in Microsoft Excel, Matlab, MathCAD, and LTSpice