

Elizabeth Seber

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I am a recently graduated mechanical engineer looking for employment. I am a self-motivated professional with excellent problem-solving and time management abilities. With very effective communication skills and a solid expertise in applied research, I am a solid addition to any team.

Education

Bachelors in Mechanical Engineering – The Pennsylvania State University, State College, PA

2018 Graduate ▪ 3.11/4.00 GPA ▪ Abington Honors Program

- Capstone Project Team with Elkay Manufacturing awarded 2nd out of 139 in engineering showcase. Reduced shipping costs by 70% with a payback period of 5 months with improved shipping cart design.
 - President of PSU Abington Engineering Club 2015-2016. Constructed a Filament Extruder to turn recycled plastics into filament for PSU Abington's 3D Printers.
 - Won 1st and 2nd place at two 2016 International Business Case Competitions with Lockheed Martin, Moorestown, NJ location.
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Skills and Technology

MS Office Suite ▪ Solidworks ▪ AutoCADD ▪ MATLAB ▪ Multisim ▪ Maple ▪ Capstone ▪ NAUI SCUBA Trained ▪ Auto Tracker ▪ Commercial and Scientific Filming ▪ Set Construction, Audio and Light for Professional Theater ▪ Advanced Machine Design ▪ Entrepreneurial Leadership ▪ Heat Transfer

Professional Experience

Research Assistant

April 2018 – September 2018

The Pennsylvania State University, State College, Pennsylvania

Conducted field research on live Ctenophores in Bermuda as part of a study on scaling of metachronal swimming within the Environmental and Biological Fluid Mechanics group.

- Set-up and altered experimental equipment as needed to record high-speed footage of specimens
- Performed kinematic tracking analysis and Particle Shadow Velocimetry (PSV) Analysis on data

Research Assistant

August 2017 – May 2018

The Pennsylvania State University, State College, Pennsylvania

Assisted multiple graduate students in the Biological & Robotic Intelligent Fluid Locomotion Lab

- Updated a magnetic flight mill with multiple systems for use in experimentation
- Tracked multiple points of interest on moving fruit flies' flight

Student Researcher

May 2017 – August 2017

Texas & M University, College Station, Texas

Performed extensive research in the Heavy Oil, Oil Shales, Oil Sands & Carbonate Analysis and Recovery Methods group on combustion kinetics and steam injection oil recovery methods.

- Implemented knowledge of piping and fittings to fix steam generator and combustion set-up
- Won 2nd out of 164 participants in TAMU Engineering Summer REU Poster Session
- Published findings in two conference papers and in the Journal of Petroleum Science and Engineering

Student Researcher

December 2014 – August 2016

The Pennsylvania State University – Abington Campus, Abington, Pennsylvania

Developed a formula to correct long-standing paradox related to ladder style filter circuits at lower frequencies alongside a small team.

- Designed and simulated circuits to give evidence to the new formula
 - Presented findings at the American Association of Physics Teachers Summer 2016 Meeting
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References Available on Request