

Shawn Albertson

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EDUCATION

OLIN COLLEGE OF ENGINEERING

MAY 2021

- B.S. Mechanical Engineering, GPA 3.74
- Relevant Coursework: Finite Element Analysis (Ansys), Fluid and Heat Transport, Thermodynamics, Controls, Mechanics of Solids, Mechanical Design (SOLIDWORKS), Software Design (Python), Data Science (R)

TECHNICAL EXPERIENCE

Marine Robotics Engineer – Olin College

PRESENT

- Developing a robotic system to monitor water quality and fish health in floating nearshore fish farms

Mechanical Engineer – GE Healthcare

FALL 2020 – SPRING 2021

- Developed testing platform to evaluate effect of vibration on microphone in intercom systems
- Improved CT scan operator control box with water resistant design while maintaining acoustic qualities

Desalination Research Assistant – Olin College

SUMMER 2019

- Designed and validated lab scale reverse osmosis desalination system
- Optimized pressure vessel to contain salt water at 1000 psi
- Implemented data collection system to gather data continuously for over 48 hours

Mechanical Engineer, Team Leadership – Olin Baja SAE

FALL 2017 – FALL 2019

- Improved vehicle durability and reduced weight by developing a carbon fiber seat
- Ensured vehicle was within SAE specification by designing and manufacturing body panels and splash guard
- Promoted driver experience by developing test track features and overseeing team drive days

Process Engineer – Midcoast Pop-Up PPE Factory

SPRING 2020

- Produced more than 5,000 face covers through acquisition and operation of a laser cutter
- Streamlined production processes and volunteer coordination to ensure high volume and quality output

Course Assistant – Olin College

FALL 2018 – FALL 2020

- Courses: Transport Phenomena, CNC Routing Technology, Sustainability Synthesis

PROJECTS

Fluid Modeling (MATLAB)

FALL 2019

- Visualized velocity and position profile of fluid flow in entrance region, verified model with physical test setup

Hydrostatic Boat Hull Simulation (Python)

SPRING 2021

- Used a Gaussian process model of righting moments to simulate oscillating boat hull in variable water surfaces

Analysis of Forces in Four-Bar Linkages (MATLAB)

FALL 2018

- Applied understanding of linkages to model resulting forces in the context of bicycle suspension

GIS Visualization Tool (Python)

SPRING 2020

- Command line tool to visualize GeoTIFF files representing ocean temperature and salinity

SKILLS

Design SOLIDWORKS, Python, Ansys, MATLAB, Mathematica, Fusion 360, Adobe Illustrator

Build CNC Mill, Weld, Laser Cut, 3D print, Sheet Metal, Lathe

ADDITIONAL EXPERIENCE

Commercial Fisherman – PWS Alaska, F.V. Windswept

SUMMER 2020

- Hauled gear for 14 hours per day in the world's most sustainable fishery

Sea Kayak Guide – Maine Sport Outfitters

SUMMERS 2017 - 2018

- Created engaging, educational experiences by leading kayak tours off the coast of Maine

Bicycle Mechanic – Maine Sport Outfitters

SUMMERS 2014 - 2017

- Responsible for a range of repairs, trained new mechanics, worked closely with customers