# **Shawn Albertson**

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#### **EDUCATION**

**UNIVERSITY OF RHODE ISLAND** 

JANUARY 2023

M.S. Ocean Engineering

**OLIN COLLEGE OF ENGINEERING** 

**MAY 2021** 

B.S. Mechanical Engineering, GPA 3.74

#### **TECHNICAL EXPERIENCE**

### Marine Robotics Engineer – Olin College

**SUMMER 2021** 

 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)
- 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)
- 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**

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