

Nathan J. Selian

207-317-0497 • nathanselian@gmail.com • Freeport, ME
Portfolio: www.selianme.com • LinkedIn: [linkedin.com/in/nathan-selian](https://www.linkedin.com/in/nathan-selian)

Education

Boston University College of Engineering
B.S in Mechanical Engineering

Boston MA
Graduated May 2025

Relevant Coursework:

Thermodynamics & Heat Transfer
Product Design

AI Data Analysis
Structural Mechanics

Aircraft Performance & Design
Compressible Flow & Propulsion

Experience

Director, Harraseeket Yacht Club Youth Sailing Program

Jan 2023 – Aug 2025

- Hired and lead a team of 11 Coaches and Instructors to successfully operate a Sailing Program with more than 140 kids in 8 separate classes.
- Redesigned and brought life back to a program that had been declining for several years.
- Oversaw and executed the repair of 40+ boats that suffered prolonged periods of deferred maintenance.

Projects

Morphing Sails for Maritime Shipping

Sep 2024 - May 2025

- Utilized conceptual design and modeling techniques to create a morphable airfoil system capable of reducing emissions by up to 30% on large maritime vessels.
- Built a 1:134 scale model of the hull and sails to test airfoil control theories, autonomous navigation capabilities, and validate key performance metrics.

Repowering & Refitting a 36ft Sailboat

Sep 2020 - May 2021

- Used CAD, CAM, and CNC Milling to create an engine mounting template as an aid to the alignment and positioning of several crucial components.
- Redesigned much of the electrical systems to better suit the needs of the users. This included modifying power delivery and distribution circuits, as well as installing a NMEA2000 backbone to allow computerized systems to talk to each other and share necessary data.
- Used composites to manufacture critical structural elements such as engine mounts.

Skills

Computer: MATLAB, SolidWorks, OnShape, COMSOL, GibbsCAM, Excel

Manufacturing: Composites, CNC Machining, Additive Manufacturing, Electrical Systems, Piping, Woodworking

Leadership & Activities

Fleet Captain & Sailor on the Boston University Sailing Team

Sep 2021 - May 2025

Director, Harraseeket Yacht Club Youth Sailing Program

Jan 2023 – Aug 2025

Interests

Sailing, Skiing, Cooking, Hiking, Wooden Boatbuilding, Cars, Tinkering, Learning