# Owen Pallatroni

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## EDUCATION

**Tufts University** **Medford, MA**
Bachelor of Science in Mechanical Engineering, Minor in Economics Expected May, 2026
GPA 3.4, Dean's List

**Relevant Courses:** Materials and Manufacturing, Compressible Flow, Inventive Design, Analysis of Aerospace Engineering Data, The Energy Transition, System Dynamics and Controls, Fluid Dynamics, Electronics and Controls, Microeconomic Theory, Special Topics in Economic Development, Probability and Statistics.

**Phillips Exeter Academy** **Exeter, NH**
High School Diploma June, 2022
GPA 3.8

## EXPERIENCE

**Brayton Energy** **Hampton, NH**
*Mechanical Engineering Intern* July - August 2025

- Designed and built a custom test rig to characterize diesel spray behavior through capillary tubing as part of backup-fuel development for a natural gas turbine.
- Selected and sourced all necessary hardware and instrumentation in order to mimic specific combuster and fuel injection operating conditions.
- Performed qualitative digital analysis and data acquisition to evaluate spray characteristics, atomization, and energy demand of fuel sprays across varying tube configurations, geometries, and air–fuel mixtures.

**AMETEK Haydon Kerk Pittman** **Milford, NH**
*Engineering Intern* June - August 2024

- Designed and implemented machinery, prototypes, and fixtures to optimize manufacturing time for injection molding, part cleaning, and assembly.
- Collaborated with senior engineers to assess the needs of machine operators, implementing solutions to streamline workflow and enhance job efficiency.
- Enhanced skills in mill operation, SolidWorks, and electronics through hands-on project work, gaining deeper technical expertise in designing and fabricating practical solutions for manufacturing.

## ACTIVITIES

**Tufts Solar Vehicle Project** January 2024 - Present
*Dynamics/Suspension Team Member*

- Manufactured a variety of suspension and axle components using a Bridgeport Mill, Water Jet, Laser Cutter
- Partnered with teammates to optimize design of the vehicle's bucket seat, ensuring compliance with American Solar Challenge regulations.

**Tufts Ski Team,** *Tufts University* September 2023 - Present

## TECHNICAL SKILLS

**Software:** SolidWorks, Comsol, OnShape, LabView, State, RStudio
**Programming Languages:** C++
**Tools:** Bridgeport Mill, Instron, Waterjet Cutting Table, Laser Cutter, 3D-Printer, Injection Molder, CNC Wood Router