Lucas Simmonds

30 Dean Road, New Milford CT 06776
203-788-7851| lucas.simmonds@outlook.com | www.linkedin.com/in/lucas-simmonds

EDUCATION

University of New Hampshire - Durham, NH **Expected: May 2020**
Bachelor of Science: Mechanical Engineer *GPA: 3.69*

- Honors Program
- Dean's List: Fall 2016, Spring 2017, Fall 2017, Spring 2018

RELATED SKILLS/TOOLS/SOFTWARE

- Microsoft Office
- MATLAB
- SolidWorks
- Slack
- Thermodynamics
- Thermal Analysis & Design
- Fluid Dynamics
- Geometric Dimensioning & Tolerancing
- Lean Manufacturing
- Virtual Stream Mapping
- End Mill
- Data Analysis
- Lathe

RELATED PROJECTS

Propulsion System of Drone Pod - Durham, NH **November 2018 – December 2018**
Project Member

- Assessed design constraints and their effects on performance, efficiency, and manufacturing costs
- Studied the effects of device efficiency on thermal cycle efficiency and made design recommendations
- Coordinated with two project members to make design changes to drone pod using MATLAB

Particle Image Velocimeter - Durham, NH **September 2018 – December 2018**
Project Member

- Collaboratively designed device with two group members to create fully developed laminar flow through a test section
- Built device using basic tools and equipment and performed Particle Image Velocimetry (PIV)

RELATED EXPERIENCE

Living Bridge Project – Durham, New Hampshire **August 2018 – Present**
Research Assistant

- Design fairings to be fit into a custom streamline shape to prevent vibrations from Acoustic Doppler Velocimeter (ADV) testing and continue to improve upon fairing design
- Test fairing design using University of New Hampshire's underwater tow tank to simulate flow conditions
- Complete the design and manufacturing of the Traversing System using SolidWorks for the deployment of ADV in the Piscataqua River at turbine testing site

University of Melbourne Research Experience – Melbourne, Victoria, Australia **January 2019**
Research Assistant

- Used Laser Doppler Anemometer to measure flow velocity under a drifting ice model due to wave-ice interaction
- Utilized MATLAB to create algorithms needed to perform PIV
- Applied and accepted as one of five UNH students to participate in research experience program

Community table – New Preston, Connecticut **May - August 2015 – August 2018**
Food Runner

- Exhibited skills to work in a fast-paced environment while keeping a positive attitude

COMMUNITY & LEADERSHIP ACTIVITIES

UNH Students for the Exploration and Development of Space **September 2018 - Present**
Member

- Calibrated K-Type thermocouples using MATLAB and LabView for hot-fire test
- Identified experimentally correct chemical ratio for rocket fuel to achieve desired burn time and intensity

American Society of Mechanical Engineers – Durham, NH **September 2016 - Present**
Member

UNH Sports Team (Varsity) – Durham, NH **December 2016 – January 2019**
Cross Country/Track and Field

- Manage time effectively between academics and athletics, practicing with the team 14 hours a week