Lucas Simmonds

30 Dean Road, New Milford CT 06776 • (203) 788 7851 • lucas.simmonds@outlook.com

**Objective:** Find an internship or full-time systems or controls engineering position starting the summer of 2020 in the aerospace industry

**Education****: University of New** **Hampshire** – *College of Engineering and Physical Sciences* **Aug. 2016 – May 2020, anticipated**

GPA: **3.69/4.0** | Honors Program | B.S, Mechanical Engineering

**Tech Skills:** MATLAB| SolidWorks | Lean Manufacturing | Virtual Stream Mapping | GD&T | Data Analysis | End Mill | Lathe

**Experience****: Revision Military June 2019 – August 2019**

*Project Manager Intern*

* Tracked components on bill of material (BoM) during design stage to ensure components reach appropriate testing site
* Created part numbers for BoM using Arena Solutions
* Documented component part numbers, specification sheets, drawings, and 3D models on BoM
* Mathematically simulated various operational environments for product design to be tested

**Living Bridge Project August 2018 – May 2019**

*Research Assistant*

* Designed fairings to be fit into a custom streamline shape to prevent vibrations from Acoustic Doppler Velocimeter (ADV) testing and continued to improve upon fairing design
* Tested fairing design using University of New Hampshire’s underwater tow tank to simulate flow conditions
* Completed 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

**UNH Mechanical Engineering September 2017 – May 2018**

*Tutor*

* Guided students through coursework in Physics I & II and Calculus I & II

**UNH Institute for the Study of Earth, Oceans, and Space May 2017 – August 2017**

*Researcher: Data Analysis*

* Used Python to conduct a systematic search of the COMPTEL satellite data for evidence of polarization
* Performed simulations to estimate the polarization sensitivity for that event

**Relevant Orgs: UNH Students for the Exploration and Development of Space September 2018– present**

*Avionics Team Lead*

* Re-designed flow regulation system and launch sequence using Arduino for a hybrid engine rocket using nitrous oxide and HTPB rubber as fuel.
* Calibrated K-Type thermocouples using MATLAB and LabView for hot-fire test of hybrid engine
* Lead Avionics meetings and practice project management skills such as gaant chart progress tracking, scheduling, and critical thinking

**Other Skills:** Project Management | Creativity and Problem-Solving | Microsoft Office | Trello | Slack