

Christian M. Schrader

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OBJECTIVE	Seeking an Aerospace Engineering internship for the Summer of 2021.	
EDUCATION	Worcester Polytechnic Institute (WPI), Worcester, MA Master of Science in Aerospace Engineering expected graduation May 2022 Bachelor of Science in Aerospace Engineering , Minor in Computer Science expected graduation December 2021, 3.72 GPA Relevant courses in Optimal Control*, GNC, Rocket Propulsion, Applied Machine Learning*, Spacecraft Dynamics and Controls, Spacecraft and Mission Design*, and Software Engineering. <i>* Completed by May 2021</i>	
SKILLS	Engineering Software: MATLAB, SOLIDWORKS, Simulink, STK, Ansys Programing: Python, C, C++, Java, JavaScript, HTML, CSS, GIT Fabrication: Printed Circuit Board (PCB) Prototyping, CNC Milling, FDM 3D Printing Microsoft Office: Word, Excel, PowerPoint, Outlook, SharePoint	
WORK EXPERIENCE	Technical Intern GE Aviation, Virtual	Summer 2020 <ul style="list-style-type: none">• Applied Lean and Six Sigma in a simulated New Product Introduction project.• Selected key engine technologies and compared costs by doing analysis in Excel.
	Aerospace Intern and Group Lead NASA Ames Research Center, Aeromechanics Division, Mountain View, CA	Summer 2019 <ul style="list-style-type: none">• Lead a team of 3 interns in developing a system concept for a wildland fire fighting UAV.• Created a proof of concept robot, and wrote a technical report on the project.• Wrote heat seeking navigation algorithm and the robot's firmware in C++.
	Aerospace Engineering Intern Busek Co. Inc., Natick, MA	Summer 2018 <ul style="list-style-type: none">• Coordinated with vendors to improve part manufacturability in SOLIDWORKS.• Developed procedures for PCB prototyping and designed a vacuum chuck for PCB milling which simplified and accelerated the PCB prototyping workflow.
PROJECT EXPERIENCE	Design, Analysis, Assembly, and Test of a High-Powered Model Rocket	Present <ul style="list-style-type: none">• Designing a rocket for active stabilized descent and propulsive landing for senior project.• Responsible for flight dynamical simulation and descent control law design in MATLAB.
	NASA University Student Launch Initiative (USLI)	2018 to Present <ul style="list-style-type: none">• Co-founded the WPI USLI team in 2018. Served as the team's first Safety Officer.• Elected Captain in 2019. Led a team of 9 Officers and 44 general members to design, build, and test a rocket and UAV payload to complete a sample return mission.• Responsible for the management of team milestone reviews, avionics subsystems, and air brake control as current Documentation Officer and Avionics Lead.
	Graduate Research	Spring 2020 <ul style="list-style-type: none">• Researched Electrohydrodynamically Enhanced Two Phase Flow in Microchannels.• Conducted a literature review of microchannel nucleate boiling for the project.• Created design requirements and recommendations for an improved channel apparatus.
DISTINCTIONS	Eagle Scout, Bronze Palm , Boy Scouts of America Sigma Gamma Tau , National Aerospace Engineering Honors Society STK Level 1 , AGI Certification	November 2016 January 2019 September 2020