

## Christian M. Schrader

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<b>OBJECTIVE</b>	Seeking an aerospace engineering internship for the summer of 2021.
<b>EDUCATION</b>	<p><b>Worcester Polytechnic Institute (WPI)</b>, Worcester, MA</p> <p><b>Bachelor of Science in Aerospace Engineering</b>, Minor in Computer Science expected graduation December 2021, 3.7 GPA</p> <p><b>Master of Science in Aerospace Engineering</b> expected graduation May 2022</p> <p><b>Relevant courses</b> in Optimal Control*, GNC*, Aircraft Controls*, Spacecraft Controls, Aerodynamics, Rocket Propulsion*, Software Engineering, and Algorithms. <i>* Completed by May 2021</i></p>
<b>SKILLS</b>	<p><b>Engineering Software:</b> MATLAB, SOLIDWORKS, SOLIDWORKS PDM, EAGLE, KiCad</p> <p><b>Programing:</b> Python, C, C++, Java, JavaScript, HTML, CSS, GIT</p> <p><b>Fabrication:</b> Printed Circuit Board (PCB) Prototyping, CNC Milling, FDM 3D Printing</p> <p><b>Microsoft Office:</b> Word, Excel, PowerPoint, Outlook, SharePoint</p>
<b>WORK EXPERIENCE</b>	<div><div><b>Technical Intern</b><b>Summer 2020</b></div><div>GE Aviation, Virtual</div><ul style="list-style-type: none"><li>• Applied Lean and Six Sigma in a simulated New Product Introduction project.</li><li>• Selected key engine technologies and compared costs by doing analysis in Excel.</li></ul></div> <div><div><b>Aerospace Intern and Group Lead</b><b>Summer 2019</b></div><div>NASA Ames Research Center, Aeromechanics Division, Mountain View, CA</div><ul style="list-style-type: none"><li>• Lead a team of 3 interns in developing a system concept for a wildland fighting UAV.</li><li>• Created a proof of concept robot, and wrote a technical report on the project.</li><li>• Wrote heat seeking navigation algorithm and the robot's firmware in C++.</li></ul></div> <div><div><b>Aerospace Engineering Intern</b><b>Summer 2018</b></div><div>Busek Co. Inc., Natick, MA</div><ul style="list-style-type: none"><li>• Worked with vendors and engineers to improve part manufacturability in SOLIDWORKS.</li><li>• Developed procedures for PCB prototyping and designed a vacuum chuck for PCB milling which simplified and accelerated the PCB prototyping workflow.</li></ul></div>
<b>PROJECT EXPERIENCE</b>	<div><div><b>NASA University Student Launch Initiative (USLI)</b><b>2018 to Present</b></div><ul style="list-style-type: none"><li>• Co-founded HPRC, the WPI USLI team in 2018. Served as the team's Safety Officer.</li><li>• 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.</li><li>• Currently serving as Documentation Officer and Avionics Lead. Responsible for the management of team milestone reviews and avionics subsystems and air brake control.</li></ul></div> <div><div><b>DocTour Hospital Directory</b><b>Spring 2020</b></div><ul style="list-style-type: none"><li>• Developed a directory and management kiosk software on a 10 person Agile team for Brigham and Women's Hospital. Contributed to the team's Java codebase with GIT.</li><li>• Managed team documentation. Wrote A* based navigation algorithm and other features.</li></ul></div> <div><div><b>Electrohydrodynamically Enhanced Two Phase Flow in Microchannels</b><b>Spring 2020</b></div><ul style="list-style-type: none"><li>• Conducted a literature review of nucleate boiling in microchannels for the research project.</li><li>• Created design requirements and recommendations for an improved channel apparatus.</li></ul></div>
<b>DISTINCTIONS</b>	<p><b>Eagle Scout, Bronze Palm</b>, Boy Scouts of America</p> <p><b>Sigma Gamma Tau</b>, National Aerospace Engineering Honors Society</p> <p><b>Level 1 High Power Rocketry Certification</b>, National Association of Rocketry</p>