Christian M. Schrader

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EDUCATION

Bachelor of Science in Aerospace Engineering, Minor in Computer Science Worcester Polytechnic Institute, 3.7 GPA, expected graduation December 2021 Relevant courses include Aircraft Dynamics and Control, Optimal Control, GNC, Aerodynamics, Systems Programing, and Algorithms.

SKILLS

CAD: SOLIDWORKS, Engineering Drawings, Assemblies Programing: Python, C/C++, MATLAB, Java, JavaScript, HTML, CSS Rapid Prototyping: FDM 3D Printing, PCB Milling, CNC Milling Technical Writing: Design Reviews, Standard Operating Procedures Microsoft Office: Word, Excel, PowerPoint, Outlook, SharePoint

WORK EXPERIENCE

Technical Intern GE Aviation, Virtual Summer 2020

- Learned the fundamentals of jet engine propulsion, supply chain management systems, Six Sigma, and Lean.
- Applied skills in a simulated New Product Introduction (NPI) project.

Aerospace Intern and Group Lead

Summer 2019

NASA Ames Research Center, Aeromechanics Division, Mountain View, CA

- Led a team of 3 other interns to develop a proof of concept robot for a drone to aid in wildland fire fighting. Wrote a technical report on the system.
- Developed concept of operations, system requirements, and C++ firmware for coordinate based and heat seeking navigation.

Aerospace Intern

Summer 2018

Busek Co. Inc., Natick, MA

- Worked with vendors and engineers to revise part drawings, models, and assemblies in SOLIDWORKS.
- Developed standard procedures for printed circuit board (PCB) prototyping as well as designed and fabricated a vacuum chuck for PCB milling which simplified and accelerated the PCB prototyping workflow.

PROJECT EXPERIENCE

NASA Student Launch Initiative (SLI)

2018 to Present

- Co-Founded HPRC, the WPI SLI team in 2018. Served as the team's first Safety Officer. Responsible for team safety and risk analysis.
- Elected Captain for the 2019-20 competition year. Lead a team of 9 Officers and 44 general members to design, build, and test a rocket and UAV payload to fly over 4000ft to complete a simulated sample return mission.
- Currently serving as Documentation Officer and Avionics Lead. Responsible for the management and formatting of design reviews as well as Avionics subsystems.

DocTour Hospital Directory

Spring 2020

Software Engineering, CS 3733, WPI

- Developed a Hospital Directory Kiosk program on a 10 person Agile team for Brigham and Women's Hospital. Contributed to the team's 21,120 line Java codebase in Git.
- Responsible for managing team reports and creating UML diagrams as Documentation Manager. Wrote an accessibility based A* navigation algorithm, a quick emergency reporting system, GUI components, and other software features.

DISTINCTIONS

Eagle Scout with Bronze Palm, Boy Scouts of America Sigma Gamma Tau, National Aerospace Engineering Honors Society Level 1 High Power Rocketry Certification, National Association of Rocketry