Tristan Schuler

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EDUCATION

George Mason University, Fairfax, VA — Expected May 2019
Bachelor of Science in Mechanical Engineering — GPA 3.34
Minor in Computer Science

Northern Virginia Community College, Annandale, VA — GPA 3.41
James Madison University, Harrisonburg, VA — GPA 3.42

TECHNICAL SKILLS

Machining: Drill Press, CNC Machine, Band Saw, 3D Printing, Laser Printer
Programming: C, C++, Python, JAVA, JavaScript, MatLab, Arduino
Applications: AutoCad Inventor, Microsoft Office Suite, CircuitLab
Operating Systems: Windows, OSX, Linux

EXPERIENCE

NASA – Marshall Space Flight Center, Huntsville, AL — Aug 2017—Dec 2017
Intern

- Develop programs to interface with several GPS receivers including: JAVAD TR-G2, Novatel SpaceQuest, GNSS-SDR
- Set up tools for data capture and analysis of receiver output in Python by assessing sensitivities to attitude dependency, time, and different trajectories

George Mason University, Fairfax, VA — May 2017—Aug 2017
National Science Foundation Undergraduate Researcher (NSF REU)

- Research was converting 2D vector drawings of furniture into 3D models that could be machined with a CNC machine.
- Defined JSON structure and board manipulation techniques using Java
- Created algorithms to update boards with new joints by taking data from the user such as: number of teeth, board thickness, board type

Air Force Research Lab — Eglin AFB, FL — June 2016—Aug 2016
Intern

- Researched possibility of using open-source software such as QGround Control and APMPlanner 2.0 in conjunction with a PixHawk Flight Controller to autonomously navigate rovers
- Linked a Raspberry Pi with a PixHawk to allow custom navigation commands to be used with MavProxy, a ground control program
- Programed an algorithm in MatLab to autonomously navigate a rover based on current GPS coordinates and a bearing

George Mason University, Fairfax, VA — Sep 2015—May 2016
Robotics Club Member

- Helped construct an updated version of the university's swarm research robots (FlockBots)
- Developed a wall-following algorithm for a FlockBot using 5 infrared sensors in conjunction with an Arduino microcontroller

ADDITIONAL EXPERIENCE

Long and Foster Realtors — Feb 2015—Aug 2017
Undergraduate Teaching Assistant — May 2017—Jul 2017
ASME Robot Design Team Lead — Aug 2017—Mar 2017
High School Drumline Instructor — Mar 2014—Nov 2014

PROFESSIONAL ORGANIZATIONS

American Society of Mechanical Engineers
Society of Professional Hispanic Engineers