

# Joseph Millsaps Fitzhugh Voss Jr.

## Local Address

#205 3115 Helm St.  
Austin, TX 78705  
[josephvoss14@gmail.com](mailto:josephvoss14@gmail.com)

## Permanent Address

5610 Abilene Trail  
Austin, TX 78749  
<http://jvoss14.com/>

## Education

### **Bachelor of Science, Mechanical Engineering, May 2018**

The University of Texas at Austin

### **Related Courses**

Parallel Computing, Intro to Mechatronics (in progress), Programming and Engineering Computational Methods, Material Engineering (in progress), Fluid Mechanics, Thermodynamics, Solids, Statics, Engineering Design and Graphics, Differential Equations, Matrices and Matrix Calculations, Engineer Statistics (in progress), Engineering Communication.

### **Study Abroad**

IES Abroad: Vienna, Austria (2015)

## Experience

### **Team Member, Student Cluster Competition: Fall 2016**

Designed, built, and managed a cluster of high performance compute nodes;  
Developed remote power monitoring system using SNMP and Grafana;  
Learned and applied HPC applications: Linpack, HPCG, Paraview, Gromacs. and Hashcat;  
Attended Supercomputing Conference 2016 to compete with student teams from around the world, placed 4<sup>th</sup> overall despite lack of hardware.

### **Mechanical Engineer Intern, Trident Research LLC: Summer 2016**

Designed and built charging system for naval buoys;  
Created drawings and 3D models in Solidworks of custom parts;  
Wrote embedded firmware for safe charging of buoys;  
Completed acceptance testing for both custom and COTS parts;  
Wrote and updated documentation of the naval buoy system.

### **Student Technician, Applied Research Laboratories: Summer 2015**

Redesigned the method of reading/writing out RINEX files to use the OOP principle of encapsulation;  
Updated the in-house code base to use the new RINEX objects for file I/O;  
Extensive cataloging of the applications within the in-house code base.

### **Student Technician, Applied Research Laboratories: Spring 2015**

Created a suite of cross-compatible unit tests in C++;  
Helped develop in-house testing framework;  
Wrote documentation for how later unit testing should be executed.

### **Science and Engineering Apprentice, Applied Research Laboratories: Summer 2014**

Developed an inexpensive COTS GPS data collection platform using Python;  
Wrote software capable of decoding binary streams, translating them to the floating point representation, and writing out to formatted RINEX file;  
Interfaced with GPS receiver mounted on a DIP via serial communication.

## Skills

Proficient in Solidworks, C++, Python, Git, Linux Management & Development, Soldering, and MATLAB;  
Basic machining and assembly experience.

## Accomplishments

Presidential Achievement Scholar, 2014-Current  
Terry Foundation Scholar, 2014-Current  
Eagle Scout, Troop 3, Earned 2012  
University Honors: Fall 2014  
Captain, Texas Quidditch – Ravenclaw, Current  
Member, Gamma Beta Phi Honor Society, 2015-Current  
Member, Robotics and Automation Society, 2014-Current  
Member, ASME, 2014-Current  
Member, Texas Quidditch, 2014-Current