

DEREK JONES

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<http://www.github.com/dj0wns>

Education

- **Bachelor of Science in Computer Science**—Arizona State University, Tempe, AZ
May 2017

Qualifications

- Experience using Git and bug trackers in a production environment
- Strong written and verbal communication skills developed through team projects and presentations
- **Computer Languages and Environments:**
 - Proficient in C and C++
 - Experience with Java, OpenMP, MPI, Bash, Gnuplot, and LaTeX
 - Exposure to Python, Go, Javascript, SQL, and Matlab
- **Operating Systems:** Windows, UNIX/Linux (Arch, Redhat, Ubuntu)

Work Experience

- **Electrical Engineer**—Raytheon, Radar Signal Processing
June 2017 – Present
 - Software development for next generation Radar Signal Processing applications utilizing a distributed high performance computing architecture with strong emphasis on vectorization
 - Development consists of C++11 in Linux using Totalview, Boost.test, and Rational Clearcase
- **Software Engineering Intern**—Lawrence Livermore National Laboratory, High Energy Density Physics
May 2016 – August 2016
 - Implemented and analyzed various acceleration structures for use within LLNL's Monte Carlo Particle Transport Code, Mercury
- **Software Engineering Intern**—ViaSat Inc.
May 2015 – August 2015
 - Designed, implemented, and tested an Android collaboration application tailored for operation over satellite networks

Projects

- **Virtual Reality Visualization of Monte Carlo Particle Transport**—Honors Thesis, C++ - 1 Person
 - In a collaborative effort with the Lawrence Livermore National Laboratory, I created a virtual reality visualization of the particle transport code Mercury, utilizing an HTC Vive
 - Developed a system for generating three dimensional primitives in Unity, modified a constructive solid geometry library to allow the creation of more complex shapes, and implemented HTC vive support
- **RAID-Like Cloud Storage**—Pennapps XV - Top 30, C++/Python - 3 People
 - Created a mountable virtual drive for distributing, encrypting, and retrieving files across multiple cloud storage providers
 - Developed the FUSE filesystem implementation, added encryption and decryption functionality, developed the simulated RAID method of file splitting, and created the hooks for sending and receiving data

Competitions

- **SuperComputing 15 Conference**—Student Cluster Competition 2015, Arizona Tri-University Team
 - Collaborated with four other students to compile and run LINPACK, Trinity, WRF, MILC, HPC Repast and HPCG in a UNIX environment using the Slurm workload manager
 - Competed to compute the provided data sets in the fastest time over a three day period
- **ASU Programming Competition 2016**—1st Place Overall
 - Collaborated with two teammates to solve logic problems in C++