

Spencer Hance

234 Commonwealth Ave – Boston – MA – 02116

📞 (203) 240-8072 • ✉ shance@ece.neu.edu • 🌐 www.shance.me

Availability: January-August 2017

Education

Northeastern University

Boston, MA

*Bachelor of Science, **Computer Engineering***

May 2019

- IEEE Student Chapter Treasurer: Managed finances, sponsorships, and reimbursements
- Beta Gamma Epsilon Engineering Fraternity

Relevant Coursework

- Algorithms (C++), Networks, Digital Logic Design (Verilog, FPGAs), Discrete Structures, Embedded Design (C), Circuits & Signals, Engineering Problem Solving and Computation (MATLAB, C++)

Experience

EnerNOC

Boston, MA

Performance Engineering Co-op

January 2016 – Present

- Created automated tests to measure web-application performance using JMeter and LoadRunner
- Developed a MEAN.js application to load data for application testing
- Implemented status pages to monitor production services
- Ported a core algorithm to Python/OpenCL and gained a 7x speedup

NU Computer Architecture Research Group

Boston, MA

Undergraduate Researcher

October 2014 – Present

- **Multi2Sim Heterogeneous System Simulator**
 - Ported over 15,000 lines of C to C++ for a full application rewrite
 - Developed unit tests with Google Test for automated code validation
 - Debugged simulator code with GDB for release
 - Analyzed x86 application patterns with Valgrind for more efficient simulation
- **Student Cluster Competition (SC'15, SC'16)**
 - Designed a 3kW supercomputer with a team of students
 - Optimized scientific applications for best performance on the system
 - Troubleshooted the High Performance Computing software stack
 - Developed visualizations to show program execution
- **Fault Injection Tool**
 - Developed a bash tool to run massive GPU fault injection simulations
 - Utilized Python and SQLite3 to analyze simulation results

NU ResNet Resource Center

Boston, MA

Computer Technician

October 2014 – Present

- Performed software repairs on student devices
- Worked on 20-30 different Windows and OSX systems per week
- Collaborated with other technicians using the ServiceNow infrastructure for a seamless repair

Technical Skills

Languages: Python, C++(Google Test), Bash, OpenCL(basic), JavaScript (MEAN.js), Verilog, MATLAB, LaTeX

Software: Linux, Windows, OSX, Vim, Git, SVN, GDB, Eclipse, Splunk, JMeter, LoadRunner

Certifications: CompTIA A+ Technician