Spencer Hance

Education

Northeastern University

Boston, MA

May 2019

- Bachelor of Science, Computer Engineering
- IEEE Student Chapter: SAC Representative
- Beta Gamma Epsilon Engineering Fraternity
- Relevant Coursework
 - Embedded Design (C), Diff-Eq & LinAlg, Circuits & Signals, Physics 1+2, Engineering Problem Solving and Computation (MATLAB, C++), Engineering Design (AutoCAD, SolidWorks)

Experience

NU Computer Architecture Research Group

Boston, MA

October 2014 – Present

- Analyzed memory traffic and instruction execution on x86 and ARM platforms
- Actively contributed to multi2sim architecture simulator
- Implemented a variety of unit tests using the Google Test platform
- Optimized HPC Repast application for Student Cluster Competition '15

NU ResNet Resource Center

Undergraduate Researcher

Boston, MA

October 2014 - Present

- Computer Technician (Comp $TIA\ A+\ Certified$)
- Performed software repairs on student devicesWorked on 20-30 different Windows and OSX systems per week
- Collaborated with other technicians using the ServiceNow infrastructure for a seamless repair

Ridgefield Tiger Tech

Ridgefield, CT

COO/Head Technician

May 2012 - August 2014

- Ran a successful technology repair business with a satisfied customer base
- Gained close to 300 customers and billed over \$50k
- Responded to all customer inquiries while providing excellent customer service
- Repaired a wide variety of computer systems and mobile devices
- Worked on 10-15 different systems per week

Technical Skills

- Languages: Python (Matplotlib, NumPy, Sqlite3), C(++)(semi-proficient), Bash, OpenCL(semi-proficient), MATLAB, LaTeX
- Software: Linux, Windows, OSX, Vim, Git, Google Test, SVN, Eclipse, HP Helion, AutoCAD, SolidWorks, PSpice
- Hardware: CPU/ AMD-GPU architecture (semi-proficient), ZedBoard

Projects

- **Multi2sim** Worked on a large open-source heterogeneous platform simulator. Tasks included porting the Cache Coherency and AMD Southern Islands model from C to C++, writing Unit Tests using the Google Test platform, and debugging code throughout the simulator.
- Fault Injection Tool Built a bash tool to run massive fault injection simulations on AMD Evergreeen GPUs and analyze the results. The tool was configured to run on a SLURM cluster and used python and sqlite3 to process the results.