Jason Booth

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EDUCATION

Northeastern University, Boston, MA *May 2019*

Candidate for Bachelor of Science in Computer Engineering and Computer Science

GPA: 3.98/4.00

Relevant Courses: Machine Learning & Pattern Recognition (Graduate), Algorithms, Object Oriented Design, Large-scale Parallel Data Processing, Probability & Statistics, Computer Systems, Linear Systems

Accolades: Honors Program, Presidential Global Scholar, Bruce Pelzer Merit Scholarship, Deans Scholarship

TECHNICAL SKILLS

Languages/Frameworks: Java, AngularJS, Spring MVC, Guice, Mockito, HTML, CSS, JavaScript, C++, Linux (UI and CLI), C, CUDA, Python, Google Testing, CMake, MIPS Assembly, Verilog.

Software: S3, SQS, DynamoDB, Elasticsearch, Git, MATLAB, SolidWorks, ParaView.

EXPERIENCE

Amazon Robotics, North Reading, MA *Jul 17 – Dec 17*

Software Engineering Co-op, Tools and Integration Team

- Developed full stack websites and services using AWS, AngularJS, Guice, and Spring MVC.
- Created tools for automated fault detection and diagnostics across Amazon warehouses.
- Led creation of UI and supporting backend for configuration auditing tool used across US and EU.
- Developed multi-service root-cause detection tool greatly reducing time spent by technical support.

Northeastern University, Boston, MA *Mar 16 – Present*

High Performance Computing Team, Student Cluster Competition

- Compete internationally at supercomputing conferences, United States Champions in Denver at SC17.
- Optimize code and hardware solutions to run HPC applications within a 3 kilowatt power limit.
- Worked on cloud portion of the competition using Microsoft Azure and the CycleCloud CLI.
- Focused on data visualization and machine learning applications such as Paraview and Mr. Bayes.

Interactive Clustering Engine, NSF-funded Research Experience (REU) *May 16 – Aug 16*

- Created library for high-performance machine learning visualization system.
- Collaborated with eight student team on accelerating machine learning operations in CUDA and C++.
- Conducted algorithmic analysis and profiling of several libraries to implement K-means clustering.

PROJECTS

Machine Learning Course: 4-month Coursera class taught by Andrew Ng from Stanford University.

One-Handed Input Device: Led team to make game controller with 3D printing and Arduino parts.

Data Visualization Website: Applied JavaScript D3 API to graph and animate weather data.

HuskyHacks Hackathon: Best First Hack award for a 3D-printed Arduino based self-balancing robot.

Facial Recognition Mobile App: Presented research poster on the design of OpenCV-based mobile app.

LEADERSHIP

GPU Programming Class Teaching Assistant, Northeastern University *Sep 16 – Oct 16*

- Prepared and graded homework assignments, answered questions, and ran bash scripts to determine the winners of class competitions. Class covers CUDA coding and optimizations.

REU Research Mentor, Northeastern University *Jul 16 – Aug 16*

- Taught a high school student the basics of Git, C++, and Eigen libraries to contribute to our project.

Training, Northeastern University

- Honors College Leadership Retreat, Gordon Engineering Leadership Bootcamp, Lead-360 BLUEPRINT.