PAUL REVERE, IV

me@paulrevere4.com - 774.487.1163 - paulrevere4.com

EDUCATION

RENSSELAER POLYTECHNIC INSTITUTE
B.S. in Computer Science, Minor in Economics - GPA: 3.24
August 2013 to December 2016 - rpi.edu

EXPERIENCE

QUANTCAST
Software Engineer Intern - Big Data Services
Summer of 2016 - San Francisco, CA - quantcast.com
- Contributed to Quantcast's in-house SQL on MapReduce system, a large-scale Java project used by modeling teams to conduct research and to train machine learning models on petabytes of data.
- Implemented changes to add predicate pushdown to database reads when possible leading to efficiency gains of 10x in some cases and reduced time spent on I/O operations.
- Redesigned and implemented broadcast joins of data sets allowing for more flexible usage.
- Improved underlying testing system to ensure complete usage of unit and integration tests.

RPI SCIENTIFIC COMPUTATION RESEARCH CENTER
Undergraduate Researcher
September 2015 to May 2016 - Troy, NY - scorec.rpi.edu
- Contributed to an open source C and C++ infrastructure for finite element analysis simulations.
- Implemented a binary encoding scheme for increased precision in mesh visualization files.
- Implemented compression scheme that lead to a 3x reduction in file size.
- Developed a system to accommodate for issues that arise when writing output files in massively parallel environments with thousands of processes writing at a time.

KNOLLS ATOMIC POWER LABORATORY
Technical Intern - Reactor Technology
Summer of 2015 - Niskayuna, NY
- Worked on a large-scale Java project used by engineers to design reactors for the U.S. Navy.
- Implemented systems for statistical sampling of nuclear data to reduce input size for a larger scientific computing application.
- Reduced run time by orders of magnitude from the original system design by cutting out redundant calculations and reduced memory usage by discarding unneeded data early on.

TECHNICAL SKILLS

Java	Git	MapReduce
C/C++	Subversion	Test Driven Development
Python	Linux	Scientific Computing

RELEVANT COURSES

Algorithms	Artificial Intelligence
Data Structures	Distributed Systems
Operating Systems	Cryptography & Network Security

LEADERSHIP

SIGMA ALPHA EPSILON FRATERNITY
Vice President
December 2015 to June 2016
- Oversaw officers of a 75 member fraternity with a $250,000 annual budget. Advised in event planning and goal setting for 6 months.

Recruitment Chairman
December 2014 - December 2015
- Managed a $10,000 budget for one year dedicated towards organizing recruitment events. Organized series of recruitment events and lead a fraternity of 60 members to recruit a new class.