**Daniel Crankshaw**

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***EDUCATION***

**Johns Hopkins University (JHU), Baltimore, MD** ***Expected May 2013***

Bachelor of Science Engineering

Double Major in Computer Science and Physics

GPA: 3.85, Dean’s List – Spring 2010, Fall 2010, Spring 2011, Fall 2011, Spring 2012

**Relevant Coursework**

Machine Learning, Database Systems, Parallel Programming (Hadoop, MPI, CUDA),Object Oriented Software Engineering (Semester long group project in Java), Computer Networks, Algorithms, Linear Algebra, Differential Equations, Multivariable Calculus, Probability and Statistics

***AWARDS***

**Joseph C. Pistritto Research Fellowship** ***May 2011***

**JHU Computer Science Department, Baltimore, MD**

* Undergraduate Computer Science research award to foster excellence in undergraduate research
* Awarded based on student research proposal and faculty recommendations

***WORK EXPERIENCE***

**Software Engineering Intern, Google** ***June 2012 – August 2012***

**Seattle, WA**

* Worked on an internal continuous data processing engine used by many other Google teams
* Developed an API to add new functionality to the engine, along with unit tests and integration tests to ensure correctness and usability (C++)
* Used the API to refactor an internally developed tool in use by several teams

**Computer Science Research** ***January 2011 – present***

**Hopkins Storage Systems Lab, Baltimore, MD**

* Working with large-scale N-body dark matter simulation data as part of a collaborative project between the Physics and Computer Science departments
* Optimizing data storage for a 900 TB database by creating and analyzing efficiency tests on possible storage configurations
* Developing a set of tools for physicists to allow them to efficiently query and analyze the data (C# and Python)
* Built an application that streamlines, automates, and parallelizes the process of loading the results of the simulation into a SQL Server database (C#)
* Presented a poster on research findings at Winter 2012 meeting of the American Astronomical Society

**Physics and Calculus Peer Tutor*****September 2010 – May 2011***

**JHU Whiting School of Engineering, Baltimore, MD**

* Lead group problem solving sessions for 8-10 engineering students

**Web Marketing, Billiards.com** ***June 2009* – August 2009**

**Mountain View, CA**

* Wrote copy for an e-commerce website
* Conducted market research for a subsidiary company that trades generic domain names

**SKILLS**

**Computer Languages and Proficiencies**

Java, C, C#, Python, C++, Microsoft SQL Server, Hadoop, Git

**ACTIVITIES**

**Rock Climbing Instructor *October 2010 – May 2012***

**JHU Outdoor Pursuits, Baltimore, MD**

* Lead 8 incoming freshmen on a week long climbing and camping trip the last week of summer
* Lead rock climbing day trips during the semester
* Training includes NOLS Wilderness First Responder (80 hours), Hopkins Outdoor Leadership Training, a 10 day backpacking and leadership skills course, and a five day technical rock climbing training course

**4K for Cancer Rider** ***December, 2009 – July, 2010***

**4K for Cancer, Baltimore, MD**

* Raised $4,500 in the Spring 2010 semester to donate to the American Cancer Society and the Sidney Kimmel Comprehensive Cancer Center for cancer research and patient care
* Biked 4000 miles across the United States from Baltimore, MD to San Francisco, CA to spread awareness about cancer and continue to raise funds
* Interacted daily with the local communities to educate about cancer prevention by presenting on early warning signs and lifestyle changes to reduce risk of cancer
* Volunteered at several clinics across the country to foster hope among cancer patients

**Beta Theta Pi Fraternity**

**Scholarship Chair *May 2010 – December 2010***

* Interviewed and evaluated candidates for a $500 academic scholarship given out to Hopkins freshmen
* Organized an awards banquet to present scholarships to the winners

**Vice-President of Brotherhood *January 2011 – May 2011***

* Assisted president with administrative and organizational duties
* Co-chaired the chapter disciplinary committee
* Assisted with the new member education process and ensured it conformed to our fraternity values of mutual assistance, intellectual growth, and responsible conduct
* Attended a three day national Beta Theta Pi leadership event as training for this position