**Daniel Crankshaw**

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**EDUCATION**

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

Bachelors of Science Engineering in Computer Science and Physics

GPA: 3.88

Relevant Coursework: Parallel Programming (Hadoop, MPI, CUDA), Object Oriented Software Engineering (Semester long group project in Java), Computer Networks, Data Structures, Computer System Fundamentals (Computer Architecture), Discrete Math, Linear Algebra, Differential Equations, Multivariable Calculus, Intermediate Programming (C/C++)

Menlo School, Atherton, CA *(May 2009)*

**WORK EXPERIENCE**

Computer Science Research, JHU *(January 2011 – present)*

• 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 100 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)

• Building an application that streamlines, automates, and parallelizes the process of loading the results of the simulation into a SQL Server database (C#)

• Presenting a poster on research findings at Winter 2012 meeting of the American Astronomical Society

Physics and Calculus Peer Tutor, Whiting School of Engineering, JHU

*(September 2010 – May 2011)*

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

Web Marketing, Billiards.com, Mountain View, CA *(Summer 2009)*

• Wrote copy for an e-commerce website

• Conducted market research for a subsidiary company that trades generic domain names

Engineering Lab Intern, Alexza Pharmaceuticals, Mountain View, CA *(Summer 2008)*

• Worked in an industry research and development lab on a prototype for an inhalation based drug delivery system

**SKILLS**

Computer Languages and Proficiencies: C, Java, C#, Python, C++, Microsoft SQL Server, Git

**AWARDS**

Joseph C. Pistritto Research Fellowship, JHU *(Summer 2011)*

• Undergraduate Computer Science research award to foster excellence in undergraduate research

• Awarded based on student research proposal and faculty recommendations

Dean's List for high GPA, JHU *(Spring and Fall 2010, Spring 2011)*

**ACTIVITIES**

Outdoor Pursuits Pre-Orientation Rock Climbing Instructor, JHU, Maryland, West Virginia

*(December 2010 – present)*

• Lead 8 incoming freshmen on a week long climbing and camping trip the last week of summer

• Training includes NOLS Wilderness First Responder (80 hours) and Hopkins Outdoor Leadership Training, a 10 day backpacking and leadership skills course

4K for Cancer Rider, Baltimore, MD to San Francisco, CA *(December, 2009 – July, 2010)*

• Raised $4,500 and biked 4000 miles across America (Summer 2010) to spread awareness about cancer, foster hope among cancer patients, raise funds for cancer research and patient care

• Donated funds to the American Cancer Society and the Sidney Kimmel Comprehensive Cancer Center

Scholarship Chair of Beta Theta Pi Fraternity *(May – December, 2010)*

• Organized an academic scholarship given out to Hopkins freshmen along with an awards banquet for the recipients