**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, 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)*

• Planned and organized a scholarship given out to Hopkins freshmen, as well as planning an award banquet for the recipients