Johnny Jacobs

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<u>MAJOR</u>
Computer Science
<u>MINOR</u>
Optical Engineering

GPA: 3.8 Major GPA: 3.95

OTHER INTERESTS
Applied physics, applied chemistry, green energy, robotics, electric vehicles, engineering

PROGRAMMING LANGUAGES
Fluent in Java, C, Python, JavaScript, JQuery, CSS, HTML, Unix shell (bash, csh, etc.) Fortran. Proficient in MatLab and C^{++}. Experience with Ruby, Prolog, Scheme (Lisp), and MySQL. Eager and able to learn new ones.

EDUCATION
University of Rochester, Rochester, NY 2013- present
Los Alamos High School May 2013

EMPLOYMENT HISTORY
October 2012 – September 2014: Undergraduate Student intern
Earth and Environmental Sciences Division
Los Alamos National Laboratory

May 2015 – current: Undergraduate Student intern
Computational Physics Division
Los Alamos National Laboratory

VOLUNTEER ACTIVITIES
2015: Los Alamos Triathlon
2010-13: Jemez Mountain Trail Run

AWARDS
Rochester Dean's List, LANL Foundation Bronze Scholar, National AP Scholar, National Merit Scholar Commended Student, National Honor Society

PROJECTS
Dota 2 Stats (DotaBuff Stats Extension) – Published in the Chrome Web Store (also on GitHub). A chrome extension built using jQuery (JavaScript), HTML, and CSS. Takes stats from the website Dotabuff (which hosts stats for the game DotA 2) and displays them in a cool popup.

Othello – On GitHub. A project for an Artificial Intelligence class. It involved making an Othello engine (algorithm that plays Othello, a board game). I took our current implementation which used negamax and alpha-beta pruning and rewrote it to use bitboards as well (64-bit number representations of the board) instead of an array-based board.

PUBLICATIONS
Zhenxue Dai, Philip H. Stauffer, J. William Carey, Richard S. Middleton, Zhiming Lu, John F. Jacobs, Ken Hnottavange-Telleen, and Lee H. Spangler. Pre-site Characterization Risk Analysis for Commercial-Scale Carbon Sequestration. *Environmental Science & Technology. 2014, 48* (7), 5854–5861.