# David J Bieber

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#### **Education Princeton University**

GPA: 3.81/4.0

Princeton, N.J.

Candidate for Bachelor of Science in Engineering degree in Computer Science, June 2014.

Relevant Coursework: Algorithms, Artificial Intelligence, Operating Systems, Number Theory, Linear Algebra, Complex Analysis, Programming Techniques, Linguistics, Learning Theory, Brainwayes in Language Research

# **Dual Enrollment Coursework**

Union College · Algorithm Design and Analysis, Numerical Methods, Web Programming State University of New York at Albany · Differential Equations, Linear Algebra, Computer Security Basics

# Software

# Khan Academy, Software Engineer Intern

Mountain View, CA: Summer 2013

Experience Worked on "coach recommendations," a way for coaches to recommend exercises to their students for practice. Also developed mechanism for content creators to see and compare metrics about the content they produce.

# Twitter, Software Engineer Intern, Search

Wrote classifier for detecting machine-written tweets and performed data analysis to improve Twitter's search infrastructure. Worked with technologies including Lucene, Hadoop, Apache-pipeline, Java, Python, and Octave.

# Facebook, Software Engineer Intern, Mobile

Seattle, WA: Summer 2011

Developed new search experience for mobile platforms including iPhone, Android and the mobile web.

# **Independent Programming**

2003-Present

Selected projects: SCRABBLE, with bot and data analysis, used to determine most important English language words for the original Hasbro game. SSH-STARTUPS, a web application for connecting students with startups for summer internships and jobs. Learn Physics, a series of Java applets for teaching physics concepts in an interactive way. Additionally developed games for PC, Zune, TI calculators, and online.

# Experience •

# Leadership MATHCOUNTS

Niskayuna, NY: 2008-2010; Princeton, NJ: 2010-2011

- Coached up to sixteen middle school students each year in preparation for math competition, leading Van Antwerp Middle School team to place first in Capital District region in 2010.
- Organized and ran a MATHCOUNTS scrimmage for 36 middle school students.
- Organized and ran a one week summer math camp for middle school students for three consecutive summers.

# **Albany Area Math Circle**

Niskayuna, NY: 2003-2010

- Met weekly to solve and discuss challenging contest math problems.
- Competed in many math competitions, including USA Math Olympiad, Princeton University Math Competition, Harvard-MIT Math Tournament, American Regional Math League, and NY State Math League.

# Technical Skills

Experience with Java, Python, C, Web Development (PHP, HTML, CSS, JavaScript, multiple frameworks), MySQL, C#, ActionScript 3.0, Lisp, MATLAB and Octave, Git, IA-32 Assembly, shell scripting.

# Honors

#### Leadership

and Awards

Chair of ACM Princeton Student Chapter, 2013

Named "Heart" of Albany Area Math Circle for contributions to the group.

Named Coach of the Week by MATHCOUNTS in March 2010.

# **Computer Science**

Top scoring freshman-sophomore team at 2010 regional ACM Programming Competition.

2<sup>nd</sup> place winner of IBM. Master the Mainframe competition of over 3000 competitors nationwide.

Four time 1<sup>st</sup> place team at annual Siena Programming Contest, including two perfect scores.

Gold Division qualifier in USA Computing Olympiad.

Awarded RIT Medal in Computing.

#### **Math and Science**

Combinatorics and Number Theory finalist at Princeton University Math Competition.

New York Math League perfect scorer.

Qualifier for USA Math Olympiad, and six time qualifier for American Invitational Mathematics Exam.

Qualifier for semifinals of USA Physics Olympiad contest.

Earned 16 medals over four years from Science Olympiad state and regional competitions.

Tau Beta Pi Member, National AP Scholar; National Honor Society Member; SAT: 800M/800W/800R