JAMIS M. JOHNSON 2.0

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EDUCATION

M.S. Computer Science, Machine Learning focus, Graduate Fall 2014
Columbia University, New York, NY
- Current coursework: Machine Learning, Computational Learning Theory, Computer Networks

B.S. Applied Mathematics, **B.S. Computer Science**, May 2012
University of Utah, Salt Lake City, Utah
3.5 Cumulative GPA

Mandarin Language Program, Fall 2006
Jiao Tong University, Shanghai, China

RELEVANT COURSEWORK

Senior Capstone & Image Processing, Fall 2012
- Developed an image processing library from scratch, written in C.
- Built iPhone, iPad and Android applications to process photos and video, frame-by-frame.
- Developed a server-side version of the software for post-processing uploaded video.
- Placed 1st of 25 teams in the annual senior project competition.

Machine Learning, Stanford Online, Fall 2011
- Covered regularized linear and logistic regression, gradient descent, support vector machines, k-means clustering, principal component analysis, and anomaly detection.
- Built a supervised-learning-based optical character recognition system via neural network
- 95% average score on all coursework.

Numerical Analysis, Fall 2011
- Studied numerical differentiation and integration, quadratures, splines, matrix factorization, sparse matrices, Legendre polynomials and iterative solutions to nonlinear least squares.
- Final paper and presentation on parametric Bézier curves.
- Ranked 6th in the class.

ACM Programming Competition, Rocky Mountain Region, Fall 2011
- 6th of 70 teams competing.
- 1st place from the University of Utah.

Math Finance I & II, Fall 2011, Spring 2012
- Learned continuous and discrete time finance.
- Mastered Black-Scholes, Monte Carlo simulations, the GARCH model, pricing options, geometric Brownian motion, stochastic dynamic programming, jump diffusion modeling, and approximating implied volatility.
- Extensive use of MATLAB for simulations and projects.

Software Engineering for Large Data Sets & Scientific Visualization, Fall 2009, Fall 2010
- A year-long project aimed at consuming and visualizing stock market data.
- Wrote a cron-scheduled Python script, fired nightly, to authenticate with a financial data feed, download daily price movement and trade volume for all NYSE tickers, and then parse and store the data in a relational database.
- Utilized Matplotlib to visualize daily volatility across 5 years of history, 2,200 companies and 2.8 million points of data.

EMPLOYMENT

HireVue.com, Full-time, December 2011 – July 2013
- Hired as a software engineer to build backend API's and implement new features for our software, which simplifies and digitizes the process of hiring new employees.
- Mentored by a small, elite group of highly experienced engineers.
- Working with the following technologies: Python; Django, a backend web framework; AngularJS, a frontend JavaScript framework; jQuery; Git for distributed version control; ffmpeg for video transcoding; and a Linux environment.

3PDx, September 2012 – February 2013
- Working with an early phase bioengineering startup to engineer a smartphone device for detecting HIV/AIDS.
- Responsibilities include designing and programming our smartphone app, as well as the network communication between the device and phone.

Sparrow Healthcare, Summer 2011
- Lead software engineer and designer for Sparrow Healthcare's suite of iOS apps.

Skweez.com, May 2009 - August 2010
- Founder and primary engineer of mobile daily-deals site.
- Built our SMS text messaging infrastructure and website.
- Sold the company in 2010 after acquiring over 8,000 subscribers.

SKILLS

Proficient: Python including SciPy and matplotlib, MATLAB, C/C++, Java, Linux/Unix, Vim, Git, Objective-C
Web: Django, JavaScript including AngularJS and jQuery, CSS/Less, Bootstrap, HTML5

SERVICE

Eagle Scout, 2004
Boy's State, 2004
- 1 of 4 finalists, of 500 students, to represent Utah as a Boy's Nation Senator