

Sean Helvey

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****Available full-time in August****

Willing to relocate

Objective

Work together with a team of smart people to build amazing software and become a better developer.

Interests

Programming Languages, Software Engineering, Methodologies such as Agile, Rapid, and Scrum, Web & Mobile Development

Skills

Intermediate: HTML, CSS, JavaScript, jQuery, Bash, Python, Matlab, Java

Beginner: C, C++, Objective-C, C#, ML, Scheme, Prolog, Sed, Awk, Perl, PHP, SQLite, Oracle, MongoDB

Education

New York University

MS Computer Science (2010-2012)

Preparatory Accelerated Course (PAC) (2009)

Cal Poly San Luis Obispo

BS Business Administration (2002-2006)

Dual Concentration in Financial Management and Accounting

Experience

EnergyHub | *Liaison & Application Developer* (2012 Spring Internship) .NET, C#, WPF

EnergyHub is a startup developing systems to help consumers save energy. Our setup application automated a 17-step web based process and utilized the wireless local area network (WLAN) to achieve the initial thermostat pairing. Windows Presentation Foundation (WPF) was used together with C# to create a pleasant user experience (UX).

Bloomberg | *Financial Software Developer* (2010 Summer Internship) JavaScript, C, GTK+

Translated the OTUS function from C/GTK+ to JavaScript. OTUS allows Tradebook clients to add users to the system. The task required a complete rebuild of the graphical user interface (GUI) and all front-end business logic. Participated in Bloomberg B-Trained throughout the Spring prior to the Summer Internship.

Allianz Global Investors Capital | *Equity Trading Analyst* (2008-2009) VBA, Matlab

Built pricing models for thinly traded equity derivatives based on linear interpolation. Automated reporting and position monitoring using VBA. Portfolio risk was visualized using Matlab.

Allegiance Capital | *Fixed Income Research Associate* (2005 Summer Internship, 2006-2007) Excel

Implemented default probability and loss model for Commercial Mortgage Backed Securities (CMBS). Worked with developers and portfolio managers to track positions and price holdings.

Student World Assembly | *Director of Internal Communications* (2004) Access, Outlook

Lead database development and managed all internal email communications.

Projects

hackNY - Student Hackathon - "TweetSweepa" (Spring 2012) Python, Google App Engine

Twitter Search & Natural Language Processing (NLP) w/ Python and Google App Engine. The Viterbi algorithm for Hidden Markov Models (HMM) was utilized to find the most likely sequence of part of speech (POS) tags that would result in the observed Tweet. Active Learning allows users to add words to their own lexicon. The problem space is reduced over time as users tag out of vocabulary (OOV) words.

NYU Steinhardt - Digital Signal Theory - "MimicMe!" (Fall 2011) Matlab GUIDE

Bird vocalization was the focus of the project. Mimicry can be of the same species, different species, or man made sounds. A Fast Fourier Transform (FFT) was used to analyze data from the time domain. Matlab GUIDE was used for visualization.

NYU Courant Institute - Open Source Tools - Survey Application (Fall 2011) Bash, Python, JavaScript

The goal of the project was to demonstrate our knowledge of Open Source tools. What started as a shell script evolved into a Python CGI script before completing its metamorphosis into a full-scale web application. JavaScript was used for animation.

Philanthromeme.org - Website, Blog, Social Media (Spring 2011) HTML, CSS, WordPress

Created the character "Phil" to teach people about philanthropy. Stories highlight sustainability and social responsibility.