# Matthew Hielscher

Portfolio, GitHub, and social media at: http://www.wasabiflux.org/
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## WORK EXPERIENCE

**Junior Programmer**          *FileYourTaxes.com*                    June 2005 – May 2006
- Developed e-filing logic and interface in Perl to match state tax return specifications.
- Built an extension to tax preparation system to allow on-the-fly extraction of compressed archived client data across a distributed network of servers.
- Designed secure network device to function as a firewall and safe fileserver for sensitive data. Implemented redundant security features, automatic proprietary software updates, and web configuration interface.
- Developed web server log analysis tool with PHP and Perl.
- Managed workstations and server running Red Hat Enterprise. Managed Apache, NIS, and Samba.

**Contributor**          *Marathon Open Source Project*          March 2000 – July 2003
- Implemented the *Lua* scripting language in the open source game engine Aleph One to allow greater scenario creation control.
- Added graphical enhancements: expanded resolutions, fog effect control; and XML configuration options.

## PROJECTS

**Aggr**                    *Python+Django*                    September 2012 – present

A web application for aggregating, filtering, and reading RSS and Atom feeds.

**Simplebot**                    *Python*                    September 2009 – February 2010

IRC utility bot for channel moderation and information reference, with access to Google, Wikipedia, and pastebin.com. Runtime loadable command modules, user authentication and access levels, XML configuration.

**Robot Arena**                    *C++, Java*                    October 2008 – December 2008

Simulation of intelligent competitive agents using various AI algorithms and parameterization improved by genetic algorithms. Graphical interface in Java, backend in C++.

**EigenMaze**                    *Java*                    January 2005 – March 2005

3D OpenGL networked game engine. Included deathmatch and capture the flag modes. Designed and developed from scratch over 10 weeks in a team environment. Totaled 10,000 lines of code.

## DISTINCTIONS AND ACTIVITIES

- Ranked 5th of 49 teams in 2008 Southern California Regionals of the ACM International Collegiate Programming Contest. Top 10 in 2004.
- Organized and administered 2005, 2006, 2008 UCSB ACM Programming Contests.
- Placed 2nd in PuzzleCrunch 2006, hosted by UIUC. Participated in Puzzlecrack 2005, 2006.

## EDUCATION

*Various certificates*          3 courses w/ Highest Distinction, 1 course w/ High Distinction
Udacity, http://www.udacity.com/                    2012 – present

*Bachelor of Science*, Computer Science          104 of 132 major quarter-units completed
University of California, Santa Barbara                    2003 – 2009