

PHILLIP ROBERT FRITZSCHE

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EDUCATION

CONNECTICUT COLLEGE, New London, CT B.A. May 2011
Major: Computer Science Computer Science GPA 3.935
Minor: Mathematics Cumulative GPA 3.697
Honors: Graduated Magna Cum Laude with Honors and Distinction in Computer Science

WORK EXPERIENCE

Amazon.com, Seattle, WA Summer 2011 - Present
Software Engineer Assisted in the development and project planning of various new technologies for the purpose of optimizing the Amazon.com website. Developed large scale distributed systems for use in analyzing the performance of web pages and worked on technologies designed to decrease the amount of time taken to access content.

Poke Poke Productions, Seattle, WA and New London, CT Fall 2010 - Present
Founder / SDE Developed a whack-a-mole game for the Android mobile platform [whackymoies.com]. Gained experience using Java for mobile development and worked alongside a graphic designer to create a quality experience for those playing the game.

Self-Employed, New London, CT Spring 2011
Python Consultant Served as a source of information for questions regarding Python programming. Instructed engineers at small companies on how to develop cross-platform applications in Python, and assisted in the development of applications for distribution on Windows / OS X computers.

Google, New York, NY Summer and Fall 2010
SDE Intern Helped design and implement features for crisis response related programs under Google's .org division. Gained experience dealing with a number of areas in software engineering, including the use of Python, JavaScript, and other web-related programming skills.

HFOSS Program, Connecticut College, New London, CT Summer 2009
Project Lead Managed a small group of students in developing humanitarian open source software for the Google Android mobile operating system. Supervised the development of a disaster relief program while collaborating with others working on projects at Trinity College.

PUBLICATIONS

Fitness Biasing for Evolving an Xpilot Combat Agent, with *Gary Parker* June 7, 2011
Proceedings of the 2011 IEEE Congress on Evolutionary Computation (CEC 2011)
In this paper we present an application of computational intelligence system titled Fitness Biasing, a type of Punctuated Anytime Learning, for learning autonomous agents in the space combat game Xpilot <xpilot-ai.org>.

Reinforcement Learning with Adaptive Kanerva Coding for Xpilot Game AI, with *Martin Allen* June 7, 2011
Proceedings of the 2011 IEEE Congress on Evolutionary Computation (CEC 2011)
In this paper we present a method for automating and greatly speeding up the process of abstracting an environment in terms a computer can understand for the purposes of reinforcement learning, a task that is generally done manually by the programmer. This technique was successfully applied to the complex game environment, Xpilot <xpilot-ai.org>.

Investigating the Effects of Learning Speeds on Xpilot Agent Evolution, with *Gary Parker* October 9, 2011
Proceedings of the 2011 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2011)
In this paper we present a comparison of the effects of varying play speeds on a genetic algorithm in the space combat game Xpilot with the goal of increasing the quality and speed of standard learning algorithms in Xpilot <xpilot-ai.org>.

SKILLS SUMMARY

Strong: Python, Java, Django, Google App Engine, Mercurial, Perforce, Subversion, Android, HTML, CSS
Weak: JavaScript, C / C++, Objective-C, Scheme, Git, iOS, MySQL, PHP, Perl