

Joshua A. Bryan

1341 S Lombard Ave, Cicero, IL 60804
(773)852-8733, josh.bryan@gmail.com

- OBJECTIVE** A position in the field of software engineering with special interests in artificial intelligence, data mining, and multi-agent systems.
- EDUCATION**
- Doctoral Student, Computer Science* ABD as of May 2011
University of Illinois at Chicago
Emphasis on probabilistic reasoning in multi-agent systems and artificial intelligence.
- Masters of Science, Computer Science* Graduated December 2009
University of Illinois at Chicago
Thesis: Approximate Opponent Modeling in Kriegspiel
- Bachelor of Arts, Computer Science* Graduated December 2004
University of Missouri at Columbia
Minor: Music Performance
Cum Laude
- COMPUTER SKILLS** *Languages & Software:* Java, C/C++, Python, Ruby, PHP, SQL, \LaTeX , HTML, Javascript, Perl, Matlab, Subversion, Git, Perforce
Operating Systems: Linux (Debian and Redhat based distributions), Unix, Windows, MacOS.
- EXPERIENCE**
- Research Assistant* May 2009 – Present
University of Illinois at Chicago
Department of Computer Science, Multi-Agent Systems Lab
Chicago, IL
- Researched algorithms for efficiently solving Partially Observable Markov Decision Processes in Multi-Agent Systems.
 - Studied compact representations of state space in particle filters.
 - Managed laboratory servers, websites, and other electronic resources.
- Software Engineer* June 2008 – April 2009
CashnetUSA.com (presently Enova Financial)
Chicago, IL
- Developed and maintained web based payday loan application system in Ruby.
 - Helped develop and integrate open source SMPP protocol library for sending text messages.
 - Developed VOIP based automated answering service.
- Graduate Assistant* August 2007 – June 2008
University of Illinois at Chicago
Department of African American Studies
Chicago, IL
- Developed, edited, and maintained department website and content management system for the Department of African American Studies
 - Provided network and desktop technical support to the department of African American Studies and History

Freelance Software Developer April 2006 – June 2008
Self Employed
Chicago, IL

- Developed internal and external web applications using the LAMP stack for a variety of clients including:
 - Inspired Concepts, Inc. (<http://www.yojournal.com>)
 - National Runaway Switchboard (<http://www.1800runaway.com>)
 - Patti Gay, Artist (<http://www.pattigay.com>)
- Developed internal Java based supply chain routing optimizer for Build-A-Bear Workshop.

Programmer April 2005 – April 2006
Innerwise Inc. (d/b/a ItsYourDomain.com)
Schaumburg, IL

- Developed software to sell domain names and related services in a Linux / Apache / MySQL / PHP environment.
- Developed back-end software using Java to integrate registry Extensible Provisioning Protocol services with web based sales and account management.

Consultant June 2004 – April 2005
Purple Tree Technologies
Columbia, MO

- Researched technologies and standards for cell phone data transmission.
- Designed and program proof of concept demonstrations.
- Coauthored a patent for a cellular emergency alert system.

Private Music Teacher March 1999 – April 2005
Self Employed
Columbia, MO

- Taught a wide range of students (ages 5 to 35) percussion instruments and styles ranging from Classical to Jazz, Pop, and Rock.
- Maintained a studio of 7 to 10 students for 6 years.

PUBLICATIONS Patents

Karl, Maurice W., and Joshua A. Bryan. “United States Patent: 7616942 - Alert system and personal apparatus,” November 10, 2009.

Workshop Papers

Bryan, Josh, Piotr Gmytrasiewicz, and Antonio Del Giudice. “Particle Filtering Approximation of Kriegspiel Play with Opponent Modeling.” Workshop on Multi-agent Sequential Decision Making at the International Conference on Autonomous Agents and Multiagent Systems, Budapest, Hungary, 2009.

REFERENCES Available upon request.