Zachary R. Dwiel

Current Address:
7240 Forsyth Blvd
St. Louis, MO 63105

812-345-9107
zdwiel@gmail.com
dwiel.net

Permanent Address:
2712 Rock Creek Ct.
Bloomington, IN 47401

Summary

Recent graduate of Washington University in St. Louis with a Bachelor of Science in Computer Science seeking employment working with exciting new web technologies. Highly self motivated with experience working in teams, anticipating others' needs and going beyond what is asked. Has strong interest in semantic web technologies, new media distribution, machine learning and tangible results.

Projects

EnerJar – http://enerjar.net *Spring 2008*

- Won first prize at the Greener Gadgets Design competition ($2,500)
- Wrote software and helped design hardware for simple DIY watt meter, now available free at EnerJar.net

Independent Study Research Project – http://dwiel.net/english/ *Fall 2007*

- Found and leveraged existing open source software for use as RDF database with SPARQL query language
- Programmed system which parses English language commands into SPARQL queries
- Built a simple web demo front end to collect usage information and understand its strengths and weaknesses
- Designed entire system from scratch, with ability to keep code simple, powerful and readable

What About What? (2 week development time) – http://dwiel.net/whataboutwhat/ *Fall 2007*

- Rapid prototyping of LAMP website with mixed Perl/PHP back-end
- Continuously aggregates data from thousands of online sources
- Shows statistics about search terms: the term's frequency of use over time, other words often used in the same texts and the relative number of nearby positive versus negative adjectives graphed as a function of time

*MMM (**m**ulti **m**edia **m**idi **m**eta **m**usic) – http://sourceforge.net/projects/m-m* *Summer 2006 – present*

- Programmed and designed a unique and intuitive graphical environment for manipulating a real-time information processing chain through a directed graph - similar to Yahoo! Pipes, Reaktor and MaxMSP
- Designed primarily for creating music, with filtering RSS feeds, connecting UNIX pipes, etc also in mind
- Created an open source library for the Lua programming language – http://luaforge.net/projects/luamidi/

Work Experience

Metaweb *Summer 2008*

- Used data mining techneiques to extract names, GPS coordinates and other disambiguating features of all cities, counties and states in the US as well as most of the world from multiple multilingual databases
- Worked with sales team to quickly create statistics summarizing these multi-million entry databases
- Created tools to perform quality assurance on the large amount of data I mined (over 2.5 million assertions)
- Learned to work in a fast-pased and challenging startup atmosphere

Indiana University Biology Department *Summer 2007*

- MySQL, Perl, Bourne Shell, C
- Adapted legacy code to handle new situations and solve new problems
- Creatively manipulated analysis pipeline to offer insights into data
- Enjoyed the opportunity and challenge of working with biology, for which I had very little background

Washington University Computer Science Department *Fall 2006 – Spring 2007*
Indiana University Computer Science Department *Fall 2004 – Spring 2005*

- Teaching Assistant for *Programming Systems and Languages* a 400 level class for upperclassman
- Teaching Assistant for *Introduction to Computer Programming* an introductory class for graduate students
- Teaching Assistant for *Introduction to Programming* at Indiana University during senior year of High School
- Greatly improved my communication skills and depth of understanding of material covered in the courses

End Game Technologies, LLC (ZEUS) *2003 – 2006*

- Designed and implemented Visual Basic user interfaces for a data analysis suite
- Parsed poorly formatted data from NFL.com

Language and Technology Experience

Advanced Courses

Python · C/C++ · Perl · PHP · Lua · Linux (most experienced with Debian) · Bourne Shell · Apache · Java · Scheme · Lisp · Matlab · Javascript · HTML · CSS · MySQL · SPARQL

GPA CS Residency: 3.75 GPA Cumulative: 3.32

References available upon request

Data Minnig† · Netflix Challenge† · Introduction to Artificial Intelligence† · Machine Learning† · Computer Vision† · Rapid Prototype Development and Creative Programming · Technology Entrepreneurship† · Compilers* · Programming Languages*

* completed during senior year of high school

† graduate level