

Eric M Walton

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Website

www.ericmwatson.com

LinkedIn

[linkedin.com/in/EricMWalton](https://www.linkedin.com/in/EricMWalton)

GitHub

github.com/EricMWalton

Objective

Five years ago, I had a successful music career and a hobby of programming. A little over a year ago, I decided to become a full-time programmer with a hobby of music.

Experience

Java EE Developer / Statistician (freelance) *Home Energy Analytics*

Mar 2014 - present

- create documentation for existing regression analysis program.
- deploy the HEA web app, using Eclipse, Java EE, Maven 2, and Apache Subversion on local machine.
- refactor regression analysis for clarity and modularity.

Ruby / Node.js Developer (freelance) *Whizzimo.com*

Jan 2014 - present

- create and configure a database on the pronunciation, morphology, and definitions of English words.
- deploy a Node.js server for handling word queries and hosting listeners on the database.

Ruby Developer (freelance) *class-central.com*

Feb 2014 - Mar 2014

- deployed a recommendation engine for online courses

Personal Projects

Poker Odds Calculator *ericmwatson.com/PokerOdds.html*

December 2013

- at breakneck speed (23 million hands per second), determines a winner for each board permutation and the likelihood of each outcome. To my knowledge, this is competitive with the fastest programs of its kind.

Poker hand-history parser *github.com/EricMWalton/Poker-Parser*

December 2013

- uses inherited class structure to parse hand history files from poker tournaments. Class structure is extensible both in the kinds of games (tournament, cash, etc.) and in the format of the hand history files (XML, plain text, etc).

Others

March 2009 - present

- interactive website with floating audio player
- online card game engine (PHP, MySQL, Javascript, jQuery)
- Burrows-Wheeler transform (Java)

Coursework

Machine Learning / Applied Linear Algebra *private instructor*

2013 - present

- solved real-world problems using PCA, spectral/EM clustering, support vector machines, etc.
- developed extensive mathematical background
- visualized data and solutions using Matlab

Introduction to Parallel Programming *udacity.com/course/cs344*

2013

- implemented histograms, reductions, sorting, and map algorithms in parallel

Software Debugging *udacity.com/course/cs259*

2013

- created debugging tools from scratch: command line debugger, delta debugging, statistical analysis, and run-time cause-and-effect chains

Others

2013

- Introduction to Hadoop/MapReduce
- Mathematics for Computer Science
- Bachelor's of Music, Minor in History *University of Michigan*

Skills

C++, Java, Ruby, Python, MySQL, NoSQL, CUDA, Hadoop/MapReduce, Matlab, Windows API, HTML/CSS/Javascript, Node.js, jQuery, AJAX, PHP, LaTeX