

Owen Qian

SOFTWARE DEVELOPER · NATIONAL CHESS MASTER · AI ENTHUSIAST · DEEP THINKER

☎ (416) 723-1312 | ✉ oyqian@uwaterloo.ca | 🏠 owenqian.me | 📱 OwenQian | 📺 OwenQian

Skills

Languages

C++, Java, Python, HTML5, CSS3, Javascript, Matlab

Development Tools

Valgrind, Jenkins, git, JIRA, Bash, vi/vim, Google test, gdb/lldb debugger, Cygwin, Qt Creator, Makefile, qmake

Experience

CV (Cardiovascular) Diagnostix

Kanata, Ottawa

SOFTWARE ENGINEERING INTERN

May - Aug 2016

- Improved performance of outdated Fourier transform functions by wrapping and integrating C++ library, while maintaining consistent interface
- Created **C++ instrumentation toolkit** to numerically compare and dump floating point values in hexadecimal format
- Worked in small peer-reviewed development team, collaborating using **BitBucket and JIRA**
- Streamlined workflow by replacing mind-numbing manual tests with robust automatic processes, run on a nightly basis using **Jenkins** and Google test
- Set-up local python Wiki server to document test cases and set-up procedures

Projects

Pooker: A Not So Shitty Poker AI

Side Project

NO LIMIT TEXAS HOLD'EM

Jul - Sept 2016

- Developed continuously using git with **over 150 commits**. Visit my GitHub!
- Created "intelligence" using Monte Carlo tree search with Upper Confidence Bound selection strategy
- Strong focus on modular and object-oriented design to allow for painless tuning of AI decision processes
- Judiciously managed dynamic memory alloc with **0 memory leaks** with over 500,000 allocs (checked with Valgrind)
- Studied multiple PhD dissertations and articles and reproduced their results without reading any source code

Live Free

PennApps XIII

MACHINE LEARNING GLUCOSE LEVEL PREDICTOR FOR DIABETES

Jan 2016

- Predicted blood sugar levels with **91% accuracy** with neural network classifier
- Optimized performance by employing stochastic, random-batch gradient descent

Achievements

Waterloo's First Board (Chess)

Queen's University

CANADIAN UNIVERSITY CHESS CHAMPIONSHIPS

Jan 2016

- Awarded **best individual performance** in entire tournament
- Critical contributor to Waterloo team's 2nd place finish
- Ranked in **top 100** of all Ontario chess players

Top 0.5% of all players in HearthStone

BLIZZARD'S POPULAR COLLECTIBLE CARD GAME

Jun 2015

- Ranked higher than over 10 million players worldwide
- Wrote in-depth deck guide that reached over 100,000 views on HearthPwn

Education

University of Waterloo —Second year

Waterloo, Ontario

EXPECTED B.ASC IN COMPUTER ENGINEERING (ECE)

2015 - 2020 (expected)

- ECE 250 Data Structures and Algorithms
- ECE 222 Digital Computing

2360 SAT Score 800 Math, 800 Reading, 760 Writing