Owen **Qian**

Contact
+1 (647) 383-8340
oyqian@uwaterloo.ca
http://owenqian.me
github.com/OwenQian

Languages
C/C++
Java
Python
MATLAB
JavaScript
HTML
CSS
PHP

Platforms
UNIX terminal, Vi/Vim,
NetBeans, Eclipse,
MATLAB

Interests
Chess
Traveling
Machine Learning

Skills

Object Oriented Design

- 2 years of Java/Android side projects, creating GPS app for Android
- 3 years of C++ implementing data structures and algorithms including hash-tables, quick-sort and working with OpenCV for Robotics design teams

Web Development

- Created personal website from scratch with HTML/CSS and JavaScript

Experience

Current	**One of a Kind**	

Intelligent Poker AI—Makes insightful decisions by predicting opponent's holdings
- Use of Monte Carlo analysis to calculate probability of winning
- Adjust opponent hand probabilities based on model of logical player

Jan 2016	**Live Free**	PennApps XIII

Diabetes Glucose Level Predictor
- Predicts blood sugar levels with **91% accuracy!**
- Implemented neural network with stochastic, random-batch gradient descent
- Map reduced to run on multi-threaded Linode servers

Mar 2016	**Robot Racing**	University of Waterloo

Competitive Design Team—Designing autonomously driving racing car
- Used hsv filters and colour channel manipulation to isolate red and green for traffic light detection
- Prototyped algorithm in MATLAB then transposed code to C++ using OpenCV library

May 2015	**Employee Database**

Java Program with GUI—Allowing efficient storage and look-up
- Practiced object-oriented design, applying inheritance for Part-time and Full-time employees
- Look-up of employee with ID number, first and last name, ID number, and working status in constant time

June 2015	**Lead Robotics Programmer**	FIRST and VEX Robotics

Oversaw development of autonomous robot function for 2015 Recycle Rush
- Led design and creation of plastic-bin-stacking algorithm with development schedules and strict deadlines
- Co-ordinated and worked in parallel in cross-functional environment with Mechanical and Electrical teams

Awards

Jan 2016	**Best Predictive Algorithm**	PennApps XIII
	Live Free—91% accurate neural network glucose classifier	
Jan 2016	**National Chess Master**	Canadian University Chess Championships
	Led Waterloo team to 2nd place finish with best individual performance	

Education

2015–2020	**B.ASc** Candidate in Computer Engineering	University of Waterloo
Mar 2016	Stanford Machine Learning	Coursera
Jan 2015	2360 SAT Score: 800 Math, 800 Writing, 760 Reading	College Board