# Shaun Ren

#### https://shaunren.me https://github.com/shaunren|shaun@shaunren.me

# SKILLS

#### **PROGRAMMING**

Proficient:

C • C++ • Java • Python

Familiar:

MATLAB • SciPy • Sage

CSS • JavaScript • HTML • C#

La • Lisp • SQL • Bash

Assembly • Haskell • Android • Linux

Windows • Git • SVN • Emacs

Visual Studio • Eclipse • NetBeans

#### **LANGUAGES**

Native:

English • Mandarin Chinese

Intermediate:

Japanese • Latin

# **CERTIFICATIONS**

# .NET FRAMEWORK - APPLICATION DEVELOPMENT FOUNDATION

Dec 2010 | Microsoft

# INTERESTS

Quantum computing • QFT Neuroscience • Number theory Guitar • Calligraphy • Linguistics Reading • Biking

#### **FDUCATION**

#### **UNIVERSITY OF WATERLOO**

CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE

MINOR IN PHYSICS

Sept 2014 - Present | Waterloo, ON

#### THE WOODLANDS SCHOOL

HIGH SCHOOL DIPLOMA

Sept 2010 - Jun 2014 | Mississauga, ON

• Enrolled in Peel Regional Enhanced Learning Program

# RESEARCH INTERESTS

- Pattern recognition, prediction and feedback using computational neuroscience models
- Quantum computing, theory and implementation
- Quantum key exchange protocols
- Quantum neural networks, and its applications

#### **WORK EXPERIENCE**

#### **SONY NETWORK ENTERTAINMENT** | C++ DEVELOPER

May 2015 - Present | Waterloo, ON

# **PROJECTS**

- Designed and implemented an Android arcade shooter game using accelerometer as input
- Wrote a parallel ray tracer in Haskell
- Designed and implemented a simple UNIX-like monolithic kernel in C++
- Implemented a first-order logic engine in Haskell
- Implemented a convolutional neural network in C++ for handwritten OCR
- Ported OpenTuring from Windows to Linux

#### **AWARDS**

2014	5 <sup>th</sup> /1190 in Canada	Canadian Computing Competition Silver
2014	38 <sup>th</sup> /641 in Canada	Google Code Jam Round 2 (handle:
		shaunren)
2014	347 <sup>th</sup> /13852 in Canada	Euclid Mathematics Competition
2013	1 <sup>st</sup> in Ontario	ECOO Competition Winning Team