# Shaun Ren

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

# **SKILLS**

#### **PROGRAMMING**

Proficient:

C • C++ • Java • Python

Familiar:

MATLAB • SciPy • Sage • TensorFlow

CSS • JavaScript • HTML • C#

ATEX • Lua • Lisp • SQL • Bash

Assembly • Haskell • Android

#### **SYSTEMS**

Linux • FreeBSD • Windows • OS X

#### **EDITORS**

Emacs • Vim • Visual Studio • Eclipse

#### SOURCE CONTROL

Git • SVN • Perforce

#### **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

# **EDUCATION**

#### **UNIVERSITY OF WATERLOO**

CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE

MINOR IN PHYSICS

Sept 2014 - Present | Waterloo, ON

#### Courses

PHYS 443 Quantum Physics 3 87% PHYS 256 Geometrical and Physical Optics 97%

#### **COURSERA**

Computational Neuroscience Jun 2015

# RESEARCH INTERESTS

- Pattern recognition, prediction and feedback using computational neuroscience models
- Quantum computing, theory and implementation

# **WORK EXPERIENCE**

### **GOOGLE** | SOFTWARE ENGINEERING INTERN

Jan 2016 - Present | Kirkland, WA

• Character-level deep convolutional neural networks for sentiment analysis

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

May 2015 - Aug 2015 | Waterloo, ON

- Worked on the DLNA backend of Media Go
- Implemented an on-the-fly MP3 transcoder with LAME
- Wrote a DLNA certification automation server using Microsoft Casablanca

# **PROJECTS**

- An UNIX-like monolithic kernel for i686 in C++14
- A parallel ray tracer in Haskell
- A first-order logic engine in Haskell
- A convolutional neural network in C++ for handwritten OCR
- Ported OpenTuring from Windows to GNU/Linux

# **AWARDS**

2014  $5^{th}/1190$  in Canada Canadian Computing Competition Silver 2014  $38^{th}/641$  in Canada Google Code Jam Round 2 (handle:

shaunren)

2013 1<sup>st</sup> in Ontario ECOO Competition Winning Team