

# Shaun Campbell

## Software Engineer

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in shauntc

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I'm a software engineer that is always looking to improve myself and tackle harder problems. I derive great satisfaction from building better, more efficient code and solving new problems each day. Logical thinker who enjoys solving the puzzles presented by programming.

## Skills

### PROGRAMMING

C/C++

Swift

Objective-C

Assembly

JavaScript

Java

### FRAMEWORKS

GoogleVR

GearVR

OpenGL

ARKit

ARCore

Vuforia AR

Parse

React Native

Redux

Firebase

### MATHEMATICS

Linear Algebra

Differential Calculus

Integral Calculus

Multi-variable Calculus

Vector Calculus

Differential Equations

### PHYSICS

Classical Mechanics

Harmonic Motion and Waves

Special Relativity

Quantum Theory

Thermodynamics

## Employment

### uForis

#### Software Engineer

Jan 2017 to Current

- Worked with a team to expand and maintain a C/C++ based 3D engine designed for light weight, efficient, embedded deployment on mobile hardware
- Created a 2d application interface using react native to lead into the 3d VR experience
- Integrated new frameworks across multiple platforms including Google VR, Gear VR, React Native, ARKit, and ARCore
- Used both ARM SIMD Assembly and ARM SIMD intrinsics to optimize certain parts of the engine for performance on low end mobile hardware
- Created native interface and bindings on iOS (Objective-C and Swift) and Android (Java)
- Re-architected the C++ build system on Android to use CMake
- Used agile development methodology to deploy iterative updates frequently

### Lighthouse Labs

#### iOS Development Mentor

Jul 2017 to Current

- Conducted code reviews for boot-camp attendees code, providing feedback on solution architecture and general coding style
- Assisted students with debugging, providing suggestions to help them come to the solution
- Worked with students to develop better git workflow, allowing them to work better together and helped to fix git issues that arose
- Helped students to architect solutions for their midterm and final projects
- Lead new students through programming concepts while maintaining their understanding

### Microsoft Store

#### Inventory Control Expert and Product Advisor

Dec 2014 to Aug 2015

- Managed incoming and outgoing shipments
- Worked with Microsoft Dynamics AX
- Designed workflow based on speed and efficiency
- Created a welcoming atmosphere for customers
- Basic troubleshooting in advance of connecting customers with technicians
- Handled returns and displeased customers such that they maintained a positive outlook of Microsoft and The Microsoft Store

### Paradigm Energy Solutions

#### Assistant Energy Auditor

May 2010 to Sep 2010

- Communicated with clients to assess building efficiency
- Identified and analyzed HVAC equipment for efficiency
- Analyzed building envelopes to determine inefficiency
- Calculated energy usage and potential savings
- Calculated water usage and potential savings

### The Ruddy Potato

#### Assistant Manager

May 2008 to Jan 2014

- Assisted in troubleshooting SQL based SMS software elevating more complex issues to off site dedicated support with clear, efficient reporting
- Operated as an in store link for SMS dedicated support and often implemented solutions which required local presence
- Created a schedule template to increase efficiency and show immediate feedback
- Created budgets and schedules using Microsoft Excel
- Directed Staff on shift to successful completion of receiving, orders and daily tasks
- Worked with dissatisfied customers to find an amicable solution to their concerns while ensuring the customer left satisfied and with a positive view of our store

## Projects

### Friend Economy - iOS Application

Social bill sharing app designed to share bills between friends

Designed and built for ease of use and speed

Reflects changes made on one client nearly immediately on another

Uses Firebase realtime database

Uses DispatchQueuees to maintain speed while keeping application data synced to the cloud

### Qmi - iOS Application

Collaborated with a team of four to create an app for remotely queuing at a restaurant

Shows nearby restaurants, highlighting those that support Qmi

User view and Restaurant view accessed through Parse Login

Push updates to both restaurant and user when their queue status is changed by the other

Parse, Push Notifications, Google Maps SDK, Google Places API

### Motorola FPGA Board - Assembly Hardware Programming

Created a game on a Motorola HC12 Logic Board in Assembly language

Used hardware diagrams to deduce the programming functionality of the Logic Board

## Education

### Lighthouse Labs

iOS Development Bootcamp 2016

### Simon Fraser University

Faculty of Science and Faculty of Applied Science

Courses Completed: 11 Math, 9 Physics, 6 Engineering