# **Nathaniel Morihara**

306 Bryant Avenue, Ithaca, NY 14850

(585) 944-8496 • nhm37@cornell.edu • http://NathanielMorihara.com

#### **OBJECTIVE**

Obtain a paid position that will enable me to solve complex problems through creative application development while developing leadership skills.

### **EDUCATION**

Cornell University, College of Engineering, Ithaca NY

May 2015

Bachelor of Science Degree in Computer Science GPA: 3.22

#### **SKILLS**

Java • C# • Android Development • C++ • Javascript • HTML • C • OCaml • MATLAB • User Interface • Two.js

#### **EXPERIENCE**

### Javascript Team Lead/Developer for 2Dme.

Summer 2014 - Present

- Lead a 4 person team, delegating tasks with an agile methodology, coordinating between teams and project coordinators
- Animated an 821 vertex avatar to mimic facial expressions from a webcam capture using Two.js and Intraface
- Developed an interface to manually manipulate and blend 2 or more SVGs

# Mobile App Developer Intern at Concur Technologies.

Summer 2013

- Developed a prototype application that enables employees to share travel advice
- Devised and implemented a 12 column SQLite database and query engine in Java using Android API's
- Optimized for user-friendliness by refining the gestures and XML layout of the Android UI

### Android Developer for "3 Day Startup".

Fall 2013

- Created a drink-sharing application for Android, collaborating with a web and back-end developer
- Designed and programmed the prototype Android application in two days for a presentation to investors
- Implemented connectivity between app and website with Parse Push, allowing push notifications

## **PROJECTS**

### Black Friday for Game Architecture

Spring 2014

- Awarded "Audience Favorite" out of 12 competing games at the "Game Design Initiative at Cornell" Showcase
- Developed a 10-level video game and level editor as part of a 6 person team using XNA tools in C#

#### **Tetris AI** for Artificial Intelligence

Fall 2013

- Developed an autonomous, Java-coded Tetris player that selected rational moves in real-time
- Optimized move selection using a local search algorithm, helping the player average 1,063 lines per game

#### **COURSE WORK**

- Computing MATLAB & Robotics
- Digital Logic & Computer Organization
- Analysis of Algorithms
- Embedded Systems
- Game Architecture

- Object-Oriented Programming & Data Structure
- Data Structures & Functional Programming
- Operating Systems
- Artificial Intelligence
- Information Retrieval

## OTHER EXPERIENCE

House Manager of Phi Gamma Delta.

Fall 2012 - Summer 2013

• Organized brothers for cleanups and managed the fraternity house, including facility improvement projects and budgets

#### **Soccer Coaching** for YMCA.

Fall 2013 - Present

Volunteer as a coach, organizing and teaching over 20 children weekly at the local YMCA