

# Nathaniel Morihara

306 Bryant Avenue, Ithaca, NY 14850  
(585) 944-8496 • [nhm37@cornell.edu](mailto:nhm37@cornell.edu) • 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

## EXPERIENCE

---

**Javascript Team Lead/Developer** for ToonChat. Summer 2014 - Present

- Lead a 4 person team, delegating tasks and running meetings, 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 interface to manually manipulate and blend 2 or more SVGs, and run C++ code in Google Chrome

**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         | • Object-Oriented Programming & Data Structure |
| • Digital Logic & Computer Organization | • Data Structures & Functional Programming     |
| • Analysis of Algorithms                | • Operating Systems                            |
| • Embedded Systems                      | • Artificial Intelligence                      |
| • Game Architecture                     | • Machine Learning                             |

## 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