Joshua L. Tang

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Education

Case Western Reserve University, Class of 2016   B.S. in **Computer Science** with Minor in **A.I.**

Technical Skills

<u>Proficient in:</u> Java, C/C++, C#, Python, HTML, Javascript, CSS, SQL, MATLAB, Scheme

<u>Experience with:</u> Visual Studio, Eclipse, Android Studio, Adobe CS, Sublime, Unity, Musagi, GameMaker, Linux, Bash, Powershell, Android SDK, Atmel Studio, IAR, Blender, VIM, Git, Mercurial, SVN, Azure, Firebase, jQuery, Underscore, Knockout, ROS, OpenCV

Related Coursework

Computer Vision, Machine Learning, Computational Intelligence, Databases, Software Engineering, Artificial Intelligence, Networks, Web Data Mining, Programming Language Concepts, Algorithms, Discrete Mathematics, Software Craftsmanship, Computer Architecture, Computer Game Design, Data Structures

Experience

Summer 2015:   **Software Engineering Intern for Matrix Pointe Software**

- Designed a Discussion Module to be easily implemented into any Matrix Product
- Implemented the Discussion Module from the server migrations and back-end (in C#) to the front-end (using jQuery, Underscore and Knockout). This was designed using the MVC pattern
- Added additional features to the module including the ability to save drafts, RTF support, a list of people watching the discussion, the ability to mention users and notifications

Fall 2014-Present: **Research Assistant for Michael Lewicki's Natural Perceptions Lab**

- Found the fastest material to render in Maxwell Render and the optimal resolution to obtain the lowest ratio of noise to time taken
- Helped create a database of various shapes and materials to better model how the visual cortex processes objects. We are using parallax and motion blur to define objects

Summer 2014:   **Embedded Software Engineer at Bird Technologies**

- Reverse engineered firmware and iOS app in order to replace lost files
- Wrote all of the firmware to add power management, automate initialization, and Bluetooth Low Energy connectivity to an existing module
- Created an Android app to communicate with the module via Bluetooth Low Energy

Spring 2014:   **Teaching Consultant at the GE MC^2 School**

- Teaching students how to design video games and implement their games using GameMaker
- Teaching students how to translate concepts from Genetics and Evolution into games

Summer- Fall 2013:   **Developper Intern at Flashstarts**

- Designed and implemented a graphic novel editor: Designed an application that permits artists to create graphic novels adapted to the digital medium, focusing on making them more interactive
- Designed a new graphic novel format with the goal of expanding the EPub format
- Designed a both online and offline reader for the graphic novel format produced by the editor and supervised another developer implement it

Leadership and Activities

- Scholarship Chair for Beta Nu of Theta Chi, Spring 2014
- Case Western Reserve Fencing Epee team co-captain
- Member of the Hacker Society, participated in 7 hackathons and in Battlecode 2015
- Fencing, Cooking, Designing and Creating Video Games, as well as writing music

Personal Information: Citizenship: American & French   Languages: English, French, German, Russian