http://vinhhv.github.io https://github.com/vinhhv

## **Education**

University of California, Irvine – B.S. Computer Science

December 2016

Major GPA: 3.95, Cumulative GPA: 3.77

Relevant Course Work: Design/Analysis of Algorithms, Data Structures, Software Design, System Design,
Operating Systems, Databases with MySQL, Computer Networks, C++, Python, Java

## **Experience**

Undergraduate Research, University of California, Irvine – Irvine, CA

July 2015 - Present

- Research methods to increase performance of WebGL 3D graphics applications to mirror native OpenGL 3D graphics performances, which is found to be up to 7x the performance of WebGL.
- Research methods to improve WebGL security in browsers, such as Chrome and Firefox, by creating
  modifications on the browsers' kernels, which will prevent millions of web users from malicious 3D content.
- Create benchmarks to compare performances in browser and in native platforms which are written in Javascript and C++, respectfully, and use the OpenGL/WebGL API.
- Work heavily with Linux/Ubuntu and kernel hacking/experimentation on native and browser systems in C.

Web Designer, Jazel Automotive Solutions – Lake Forest, CA

Aug 2014 - Aug 2015

- Collaborated with a team to design and style dealership websites primarily through **HTML** and **CSS**.
- Designed and built website components using Javascript and jQuery modules.

## **Projects**

UCI Clubs (Implemented in Swift)

iOS application that will allow over 300 clubs at UCI to keep their members up-to-date with their clubs' current events. Using **Parse**, the app seamlessly stores/pushes/pulls user and club data through the **Swift** Parse API.

#### OpenGL/WebGL Benchmarks

(Implemented in C++/Javascript)

Implemented various paired animated 3D programs to test and compare the GPU's performance with OpenGL and WebGL. The programs are written in **C++** and in **Javascript**, respectfully, and provide near exact implementation in each of the pair programs for the best comparison between native and browser 3D graphics.

#### Multi-Threaded File Transfer Server/Client Programs

(Implemented in C)

Implemented 3 different types of multi-threaded file transfer servers using thread per request, thread pool, and leader-follower methods to transfer requested file data from the server to the client system.

# **Technical Languages**

**Proficient**: C, Swift, HTML, CSS **Intermediate**: C++, Python, MySQL

Familiar: Java, Javascript

### Tools/Frameworks

Proficient: Unix (Mac), Linux (Ubuntu), Git, Parse, Xcode, Vim

Intermediate: Eclipse

Familiar: Windows, Visual Studio

### Club Involvement

UCI iOS App Development Club, Lead iOS Swift Developer

May 2015 - Present

• Oversee Swift code base to ensure efficiency and simplicity of implementation.

#### **Awards**

Domino Award Winner (http://dominoaward.topplers.org/)

December 2016