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### SUMMARY

Fifth year college student in computer science and engineering. Expected Graduation Date: June 2016.

#### COMPUTER SKILLS

#### Languages

- C/C++ Four years
- Familiar with: JavaScript, Python, C#, Java, Bash scripting, x86-64 assembly, Lisp, MATLAB, ML, SQL, PHP
- CUDA programming, Unity, Posix threads multi-threaded programming, OpenGL, OpenCV

#### Software

Platforms: Microsoft Windows and Linux Ubuntu

# **EXPERIENCE**

#### **Classes Completed**

Sept.2011 to present

- C/C++ Introduction and Object-oriented programming
- Computing Lab Linux, shell programming, GPU programming
- Programming Languages Functional, Imperative, Logic, and Object-Oriented Paradigms
- Operating Systems; Computer Architecture; Prototyping Programming Languages
- Computer Graphics; Network Programming; Algorithms; Artificial Intelligence; Database Systems
- Solid-State Physics, Signals and Systems, Circuits, all math and physics completed
- Signal Processing, Analog Electronics, Principles of Feedback Control; Digital Design Lab (FPGA)

### Research

Techniques in Digital Holography for Ozcan Research Lab at UCLA: September 2014 - Present

Technical Experience: developing image processing (digital reconstruction; segmentation) software for real-time algae-monitoring platform. Optimized for performance: CUDA C/C++, OpenCV, and OpenGL; achieved 50x speedup over pure CPU code; awarded Best Project and Best Demo Presentation for HHMI Undergraduate Research Group

# Internships

NASA Jet Propulsion Laboratory: June 2015 – August 2015

Technical Experience: worked in Operations Planning Software Lab; worked on pipeline for graphics visualization; work with Bullet Physics Engine, Unity C#, HLSL, HTML/CSS, WinRT; implemented culling algorithm for speeding up real-time rendering using HLSL compute shaders (5x speedup); implemented WebSocket client and server applications over raw sockets

BD Biosciences: June 2013 – September 2013

Technical Experience: wrote and reviewed C# unit testing code and XAML markup code in Visual Studio 2013; software used to visualize and analyze data provided by flow cytometer; used Static Code Analysis Tools to identify issues and provide fixes in code; used command-line scripting to help sift through code violations provided by VS

### **EDUCATION**

# **University California at Los Angeles**

• Computer Science and Engineering (CSE)

Sept. 2011 to present