# **Kelvin Silva**

# **Computer Systems Engineer**

#### CONTACT

Web kelvinsilva.com Phone +1 (626) 698-2977

Email kelvinsilva747@gmail.com

#### **EDUCATION**

#### **Bachelor of Science. Computer Engineering**

2015-2018

University of California Santa Cruz

GPA: 3.53 / 4.00

- Specializing in Systems Programming, Embedded Systems (Microcontroller, FPGA, SoC),
- Relevant Courses: C Systems Programming, Microcontroller Systems Design, Logic Design
- Tau Beta Pi Engineering Honor Society

#### **WORK EXPERIENCE**

## **Software Engineering Intern (Full-Time)**

7/15/17 - 9/9/17

HackLabs Pty Ltd / Sydney, Australia

- Continued development on an open source project: penetration testing report generation tool SERPICO to fit company's report template.
- Improved flexibility of report generation by implementing hierarchical pattern to template data model, software debugging, implemented API endpoints for retrieval and modification of data.
- Ruby with Sinatra, DataMapper ORM, HAML, XSLT, Docker, PHP, MySQL, and Amazon AWS.

#### **PROJECTS**

# **Indoor Autonomous Navigation System**

1/1/18 - 6/15/18

University of California Santa Cruz

- Lead developer for an autonomous robotic car using Robot Operating System (ROS).
- Integration of Simultaneous Localization and Mapping (SLAM) algorithm, ROS navigation software, with LIDAR and other hardware.
- Testing and simulation in Gazebo
- Python / C++ / Robot Operating System (ROS) / Gazebo

# Oscilloscope and Logic Analyzer

5/1/17 - 6/15/18

University of California Santa Cruz

- Built an Oscilloscope with working trigger by using a Microcontroller (PSoC 5) to measure voltage and Raspberry PI to graph voltages on screen to produce a waveform
- Built Logic Analyzer using similar procedure as Oscilloscope
- C / Raspberry PI / System on Chip SoC

# **TECHNICAL SKILLS**

**Programming:** C (Intermediate) / C++ (Intermediate) / Java (Novice)

Python (Novice) / Ruby (Novice) / x86 Assembly (Novice)

Git Version Control (Intermediate)

Embedded: System Verilog (Novice) / Xilinx ISE Suite (Intermediate)

PsoC Creator 4.0 (Intermediate)

Windows: Windows 32 API (Win 32) (Intermediate) / Winsock (Intermediate)

Nix: Ubuntu / Raspbian

FreeBSD Kernel

File Systems in User Space (FUSE) in FreeBSD

### **AWARDS**

■ Eagle Scout Award, Boy Scouts of America, Troop 126, Arcadia, CA

Alpha Phi Omega, Alpha Gamma Nu Chapter, National Service Fraternity