# **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 / Raspberry PI

#### Slug assistant Amazon Alexa Skill

3/3/18

Association Computing Machinery Hackathon UCSC

- Built an Amazon Alexa Skill to assist UC Santa Cruz students by providing campus and city transit information, as well as dining commons area opening hours.
- First Place Winner of Hackathon: http://dvp.st/2oOdNvp
- Amazon AWS Lambda / Python / Google API

## **TECHNICAL SKILLS**

**Programming:** C (Intermediate) / C++ (Intermediate) / C++ 11 / 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) / System On Chip

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

Association Computing Machinery Hackathon UCSC First Place Prize