**Kelvin Silva**

***Computer Systems Engineer***

**CONTACT\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**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