# McKenzie Campagna

Objective: Obtain an Electrical Engineering internship

### contact

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> Portfolio renkiyo.github.io

> > LinkedIn

### programming and modules

Verilog, Verilog Test Bench design, C/C++, Assembly, Matlab & SimuLink, PSpice, PCB Designing (Eagle), Java

## hardware systems

Tiva C Series TM4C123G

### Education

2011-Now Bachelors of Science in Electrical Engineering

San Francisco State University Specialization in Power and Digital Design

Expected graduation: Spring 2016 (GPA: 3.14)

# **Projects**

#### 2016 Solar Power Converter

San Francisco State University

- · Currently designing the schematic for a solar power converter, which will convert solar energy from a PV array into electrical energy for a utility grid
- Utilize a DC to DC Boost converter, a DC to AC Boost inverter and an MPPT controller in order to maximize the power efficiency of the system

#### 2015 **Audio Headphone Amplifier**

San Francisco State University

- · Designed a Printed Circuit Board for a low-noise audio headphone amplifier, including the system power supply, a two-stage amplifier circuit with discrete output stage, input overloading and output short protection, and panel mount user controls.
- · Generated Gerber files for manufacture, searched and sourced parts to meet mechanical and electrical specifications, and populated, soldered, and tested design.

# **Experience**

#### SFSU School of Engineering Stockroom 2013-Now

San Francisco, California

Student Assistant

· Advised students on and helped check out the appropriate supplies for students' laboratory and project related work in the engineering dept.

### 2012-2013 SFSU Biomechatronics Research Laboratory

San Francisco, California

Student Research Assistant

- · Manufactured parts for the Haptic Paddle project by using the department laser cutter
- · Researched past designs of wrist rehabilitation robots from various universities as part of the Wrist Gimbal project

# **Research Publications**

2013 **ICORR** 

> J. A. Martinez, P. Ng, S. Lu, M. S. Campagna, O. Celik, "Design of Write Gimbal: a forearm and wrist exoskeleton for stroke rehabilitation," in Proc. IEE International Conference on Rehabilitation Robotics

2013 ASEE

> N. P. Rentsch, S. Dusheyko, M. S. Campagna, O.Celik, "A low-cost dynamic plant and data acquisition system for laboratory courses on control systems and mechatronics," in Proc. American Society for Engineering Education Annual Conference and Exposition