

# MICHAEL BELLA

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## TECHNICAL STRENGTHS

<b>Programming Languages</b>	Python, C, LabView, Verilog
<b>Software Tools</b>	Eclipse, Git, SVN, Code Composer Studio, IAR, Spice AWR Microwave Office, CADSoft Eagle, Matlab, JMP
<b>Design Experience</b>	Low Power Embedded Systems, High Precision Analog Measurement Analog Design, PCB Layout, SMPS Design, RF Matching & Amplifiers
<b>Lab Skills</b>	Root Cause Analysis, SMD Soldering, Wiring Harness Construction, PCA Bringup and Debugging, Prototyping, Build Designs from Print
<b>Other Technical Experience</b>	I2C, SPI, JTAG, Boundary Scan

## WORK EXPERIENCE

**Apple Inc. – Hardware Test Engineering** October 2013 - Present  
*Electrical Engineer* Cupertino, CA

- Design and implement test plans for component and system level testing on iOS and accessory projects.
- Manage test vendors and contract manufacturers to ensure efficient implementation of all required tests.
- Work with cross functional engineering teams to identify test line issues and drive them to root cause.
- Automate functional testing and data processing tasks using Python.

**KLA-Tencor – SensArray Group** December 2011 - October 2013  
*Electrical Engineer* Milpitas, CA

- Rewrote scheduling and flash data storage code in order to use an existing code base with a new types of sensors.
- Developed firmware for MSP430 family microcontrollers to evaluate new sensor types for customer application investigations.
- Worked as part of a team to design a new embedded system architecture to lower power consumption, improve measurement accuracy, increase system flexibility, and increase product reliability.
- Developed python code to extract step heights from data generated by research prototypes.
- Wrote LabView applications to use test equipment such as Agilent 34410A, 34970A, oscilloscopes, and LCR meters.

**KLA-Tencor/SensArray Internship** June 2005 - December 2011  
*Electrical Engineering Intern* Milpitas, CA

- Debugged and performed failure analysis on low power embedded systems.
- Developed LabView applications to interface with test equipment and embedded systems for automated testing.

## PERSONAL & STUDENT PROJECTS

**Kite Control System for Wind Power Generation** 2013 - Present

- Developing Python code to detect a kite using openCV and send commands to a Logosol motor controller.
- Designing rigging to control a power kite using a servo or stepper motor.
- Started this project as part of a team at the first Makathon competition ([www.makathon.org](http://www.makathon.org)).

**Bike Light - 1000 lm Headlamp and RGB Taillamp** 2012

- Designed and programmed a bikelight controller to perform battery monitoring and control RGB LED arrays.
- Calculated power budget and selected appropriate LED drivers for my application.

**Formula Hybrid Vehicle Team - SJSU** 2010 - 2011

- Developed firmware for a PIC based battery management system.
- Worked with teammates to debug high power switching converter issues.

## EDUCATION

**San Jose State University** December 2011  
B.S. in Electrical Engineering