# MICHAEL BELLA

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## TECHNICAL STRENGTHS

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

Low Power Embedded System Design - Research & Development
- Adapted existing embedded system firmware and hardware for use with new sensor types.
- Designed, tested, and realized custom RFID systems for use in ultra low power embedded applications.
- Worked with a team to design a new embedded system architecture to lower power consumption, improve measurement accuracy, increase system flexibility, and increase product reliability.

Test Fixturing - Production and Research & Development
- Designed Characterized sensors including optical, temperature, E-Field, and thermopiles.
- Developed firmware and software to communicate with and process data from several sensors being evaluated.

**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).

**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