MICHAEL BELLA

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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 efficent implementation of all required tests.
- Work with cross functionl 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 types of sensors.
- Designed, tested and realized custom RFID systems for use in ultra low power embedded applications.
- Worked with a team to design new embedded system architectures to lower power consumption, improve measurement accuracy, increase system flexibility, and increase product reliability.

Test Fixturing - Production and Research & Development

- Characterized sensors including optical, temperature, E-Field, and thermopiles.
- Designed and tuned RF matching networks for use in high power and plasma systems.
- 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.
- Designed rigging to control power kite lines 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 issues with their high power switching converter.

TECHNICAL STRENGTHS

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

EDUCATION

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