MICHAEL BELLA

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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

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

- 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.

Test & Calibration Automation

- 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).

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