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
Design Experience	Low Power Embedded Systems, High Precision Analog Measurement Analog Design, 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 level verification on NPI projects
- Manage test vendors to ensure that all tests are properly implemented.
- Develop python scripts for test automation and data processing.
- Identify test line issues and quickly drive them to root cause.

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

· Developed production code for ultra low power MSP430 based systems targeted at semiconductor metrology.
- Designed low power embedded systems to serve as platforms for new sensor technologies.
- Adapted existing measurement system architectures for use with new sensors.
- Modified existing embedded system code bases to work with new types of sensors.
- Worked with materials engineers, physicists, and computer engineers to deliver cutting edge solutions.
- Characterized, tested, and designed RFID systems for use in ultra low power embedded applications.

· Designed test fixtures for both production and R&D use.
- Developed firmware and software to communicate with and process data from several types of sensors.
- Characterized sensors, ASICs, and passive components for use in new product designs.
- Designed and tuned RF matching networks for use in high power and plasma systems.

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

· Debugged and performed FA on several types of 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*
- Started this project as part of at team at the first Makathon competition (www.makathon.org)
- Designed rigging to control power kite lines
- Developing python code to detect a kite using a webcam and openCV while commanding a Logosol motor controller to steer the kite.

Bike Light *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.

SJSU Formula Hybrid Vehicle Team *2010 - 2011*
- Developed firmware for a PIC based battery management system.
- Helped teammates debug issues with their high power switching converter.

EDUCATION

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