MICHAEL BELLA

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TECHNICAL STRENGTHS

Design Experience	High Precision Analog Measurement and Design, PCB Layout Verilog, I2C, SPI, JTAG, RF Matching Network & Amplifiers Design
Lab Skills	Experienced with Oscilloscopes, Network Analyzers, 4Wire LCR Meters Multimeters, Root Cause Analysis, SMD Soldering, Prototyping
Software Tools	Matlab, JMP, Spice, AWR Microwave Office, CADSoft Eagle, IAR Code Composer Studio, Eclipse, Git, SVN
Programming Languages	Python, C, LabView

WORK EXPERIENCE

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

- Automate functional testing and data processing tasks using Python.
- Design and implement test plans for component and system level testing on upcoming iOS and accessory projects.
- Manage test vendors working on fast paced projects in order to provide test coverage for new product designs.
- Work with cross functional engineering teams and vendors to expedite the root cause of test line issues.

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

Test and Calibration Automation - Production and Research & Development

- Designed and tuned RF matching networks for use in high power and plasma systems.
- Designed a power amplifier and matching network for use with a high Q resonant system.
- Wrote software in LabView to servo the RF current in the high Q resonant system to calibrated levels.
- Developed test systems to characterize optical, temperature, radio frequency, and heat flux sensors.

System Design - Research & Development

- Worked with a team of physicists and engineers to develop a high precision ADC platform for sensor research.
- Designed and realized a more robust custom RFID system as a part of a low power sensor platform.
- Adapted existing embedded system firmware and hardware for use with new sensor types for use in R&D.

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

- Debugged and performed failure analysis on test systems, embedded hardware, and plasma 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 MSP430 MCU 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.
- Managed the EE team, developed project time lines, and drove schedule.

EDUCATION

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