

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 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

- Modified existing embedded system firmware and hardware to work with new types of sensors.
- Designed and characterized RFID systems for use in ultra low power embedded applications.
- Worked with a team to design new embedded system architectures to lower power consumption, improved measurement accuracy, increase system flexibility, and increase product reliability.

Test Fixturing - Production and R&D

- 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.
- Started this project as part of a team at the first Makathon competition (www.makathon.org).
- Designed rigging to control power kite lines using a servo or stepper motor.

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.
- Helped teammates 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

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