# MICHAEL BELLA

408- 717 - 0367  $\diamond$ michael.j.bella@gmail.com 88 E. San Fernando St Unit 711, San Jose, CA 95113

#### TECHNICAL STRENGTHS

Programming Languages Embedded C, LabView, Python, C/C++

Software Tools Eclipse, Git, SVN, Code Composer Studio, IAR, Spice, AWR Microwave Office,

CADSoft Eagle, Matlab

**Design Experience** Low Power Embedded Systems, RF Matching Networks & Amplifiers

Analog Signal Processing, High Precision Analog Measurement, SMPS Design

Lab Skills SMD Soldering, Wiring harness construction, PCA Bringup and Debug

Prototyping, Build designs from print

Other Technical Experience Proficient with Linux, Texas Instruments MSP430 Processor Family

#### WORK EXPERIENCE

**KLA-Tencor**Electrical Engineer

December 2011 - Present

Milpitas, CA

· Design many different automated test and measurement applications in LabView.

- · Write LabView software to acquire and process data from a wide range of lab equipment
  - Network and Impedance Analyzers
  - Spectrometers
  - Digital Multimeters
  - Agilent Oscilloscopes
- · Write embedded C for the low power MSP430 processor family
  - Design embedded systems to serve as a platform for new sensor technologies.
  - Adapt existing measurement system architectures for use with new sensor types.
- · Write Python software to process data from new types of sensors.
  - Apply calibration factors and remove intrinsic sensor offset from the data
  - Automatically identify process steps in the data, and separate them into different data sets.
- · Analyze data from new sensor designs during the research and development process.
- · Design RF matching networks for use in 13.56MHz test fixtures.
- · Design build and program test fixtures and experimental fixtures.
  - Measure on state resistance of DIO pins on an MSP430 for an error budget workup.
  - Test and calibrate CPU flex circuits at different stages in the build process.
  - Test the functionality of ICs at different steps in their processing

## **KLA-Tencor Internship**

June 2005 - December 2011 Milpitas, CA

Electrical Engineer

- · Developed LabView code for a wide range different projects
  - Automated capacitor tester
  - Wireless communication system tester
  - Synchronous serial link to a custom embedded sensor system
- · Characterized the magnetically coupled wafer communication system
- · Performed PCB/PCA diagnostic work, failure analysis, rework of SMD and through hole components.

### **EDUCATION**

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