

## Overall Objective

To serve as an integral member of the ambitious team at Sparton Corporation, provide a highly analytical perspective, and contribute to the body of knowledge of best practices.

## Specific Objective

To serve as a Junior Electrical Engineer at Sparton Corporation; to research, design, simulate, develop, and test functional electrical and electronic systems.

**Hardware:** CadSoft EAGLE, Xilinx ISE w/Virtex-II Pro, Altium Designer  
**Simulations:** PSpice, LTspice, NI Multisim, MATLAB, Simulink, Ansoft HFSS  
**Languages:** Assembly, C, .NET, Shell, Unix, Ruby, JavaScript, Verilog/VHDL  
**Protocols:** TCP/IP, ZigBee, RS-232, I2C, 1 Wire, PS/2, VGA, Diffie–Hellman key exchange

## Experience

### Excel Medical Electronics – Jupiter, Florida

*Hardware/Software Systems Engineer*

**January 2013 - Present**

[Medical Data Aggregation]

- Writing .NET drivers to extract data from medical devices based on various protocols
- Developing hardware adapters to interface with medical devices
- Assisting the lead software engineer with developing and debugging hospital server software
- Traveling to customer sites to conduct installations and training for products

### Synthes Anspach – West Palm Beach, Florida

*Associate Product Development Engineer*

**August 2011 - December 2011**

[Electric Powered Surgical Drills]

- Interfaced 1-Wire EEPROM to existing I2C bus infrastructure
- Developed test hardware to validate interactive display panels
- Reworked PCB's with precision tools

### University of Central Florida – Orlando, Florida

*Supplemental Instruction Leader*

**August 2010 - December 2012**

[Group Tutoring Sessions]

- Lead four, one hour group tutoring sessions per week
- Conducted online group tutoring sessions (with Adobe Connect Pro)
- Served as UCF's first SI Leader for both C Programming and Computer Science I

## Other Projects

### Adaptive 2.5D Visual Servoing

Developed system to autonomously correct robot position based solely on camera input

*October 2012 -  
December 2012*

### FPGA BIOS

Designed hardware controlling the communication protocols for PS/2 keyboard input and VGA screen output

*September 2012 -  
November 2012*

### ZigBee Router

Hand soldered and developed protocol for ZigBee router

*June 2012 -  
December 2012*

## Education

**Bachelor of Science in Electrical Engineering**

UCF, Orlando, FL

*December 2012*