Tim Condon

www.tjcondon.com

Professional Summary
15+ years experience in firmware, software and electronics design with a specialty in microcontroller applications. Hands on experience in all areas of the product development process: firmware and software design, circuit design and PCB layout, building and testing, prototyping, agency approvals, manufacturing assembly & test.

Design Tool Proficiency
Microchip development tools, Android Studio/ADT, TI Code Composer Studio, DxDesigner, PADs, Orcad, Eagle, Microsoft Visual Studio, LTSpice.

Microcontrollers
Microprocessors: Microchip PIC 8, 16, and 32 bit processors, TI Piccolo 16 bit, ARM, Atmel AVR, Cypress PSoC.

Programming Languages
C, C++, Java, LabVIEW, XML, HTML, Microchip assembly.

Professional Experience

Stealth startup company Cambridge MA 7/2014 – Present
Senior Integration Engineer
Medical device firmware, hardware, and software design in a high-security environment.

- Developed an Android instrument control application providing the GUI and instrument control logic
- Designed the instrument control PCB and developed the board firmware
- Designed the hardware and firmware for a 2.5A BLDC motor controller for a multi-speed high performance blower
- Developed LabVIEW applications for instrument test, R&D, and manufacturing purposes
- Led test and integration of optical and mechanical components.
- Wrote hardware and software FDA and ISO documentation; achieved FDA and ISO 13485 compliance.
- Manage hardware and software consultants

Sunedison, Inc., Belmont CA (formerly GreenRay, Westford MA) 7/2010 – 7/2014
Senior Design Engineer
Hardware and firmware design for a residential solar panel gateway including Ethernet, WiFi, and powerline communications.

- Developed TI Piccolo microinverter firmware including DC/AC inverter control, MMPT, bootloader, and PLC functions.

- Designed microinverter PCB layout
- Managed FCC testing and approval

Select Consulting Projects 10/2003 - 7/2010

Mercury Computer Systems, Chelmsford MA
Test, debug and DVT of a highly complex 32 layer embedded computing board, design transfer to manufacturing, and train manufacturing staff.

QinetiQ North America (formerly Foster Miller), Waltham MA
Physiological Telemetry System: Developed firmware for a TDMA system integrating GPS, 480 and 2.4 GHz radio modules. Developed a VC++ configuration and monitoring application.

Embed Inc., Littleton MA
Design of an ultrasound hospital hand washing monitor and Golf cart remote control using PIC 8 bit microcontrollers written in assembly language.

Radianse Inc., Lawrence MA
Integration of Wi-Fi into customer system using the Microchip TCP/IP stack and a CompactFlash Wi-Fi card. Embedded software on Digi international BSP design using Green Hills C++ tools and ThreadX. Hardware and firmware design of an Ethernet PoE splitter.

Aircuity Inc., Newton MA
Developed firmware bootloaders for air quality monitoring equipment. Firmware development for new sensors and modules, and ongoing firmware support.

Honeywell, Phoenix Controls Division, Acton MA
Hardware and firmware design of a chemical fume hood controller using a Microchip PIC18F microcontroller and Orcad/PADS layout tools.

Aircuity Inc., Newton MA 2001 - 2003
Senior Design Engineer
Responsible for all electronic and firmware development projects of air quality monitor and a building HVAC optimization system.

SmartDisk Corporation, Acton MA 1996 – 2001
Senior Design Engineer
Responsible for electronic design of consumer digital media storage devices and battery chargers.

Education

University of Massachusetts Lowell – B.S. in Electrical Engineering (Cum Laude)