

DOMINIC A. OTTAVIANO II

`dominic@ottaviano.me`

- U . S . Citizen -

OBJECTIVE

Computer engineer from Georgia Tech who specializes in embedded hardware and software development. Has a strong background in high and low level firmware development, hardware design, low power wireless, and feedback control systems. Experience designing and developing both consumer and industrial electronics.

EXPERIENCE

February 2020 – Current **FDS Avionics Corp.** Alpharetta, GA
Research & Development Embedded Engineer

- Developing C/C++ firmware for high end aviation equipment.
- Created a complete platform for wireless distribution of live IPTV over industrial wireless equipment.
- Developed mobile apps using Xamarin that had deep integration with standard aircraft flight management systems.
- Experience with aircraft systems and protocols such as ARINC.
- Created quality assurance tools allowing automated testing to help speed up work in production decreasing overhead costs by reducing time spent testing finished products.

October 2017 – November 2019 **Interactive Technologies** Olathe, KS
Computer/Electrical Engineer

- Developing C/C++ firmware for microcontrollers to enable local logical control and wireless communication with other embedded hardware and Android Apps.
- Creating Android Apps in C# using Xamarin Android to interface with embedded hardware as well as perform OTA programming.
- Extensive use of wireless protocols such as Bluetooth LE, ANT, and SMAC in a wide variety of applications.

January 2017 – October 2017 **Paranoia Quest** Buford, GA
Computer/Electrical Engineer

- Developed C/C++ firmware for microcontrollers to provide logic and control to various puzzles and interactive props.
- Create a C# software suite for staff to monitor and improve the customer's experience.
- Set up and managed the company network systems using virtualized Linux servers. Provided RADIUS authentication for both network and application access. Centralized all information to keep software on all company terminals in sync.

SKILLS

- Experience using microcontrollers in real world projects using various sensors and mechanical outputs as well as implementing control systems logic. Examples including the KW41Z, ARM Cortex-M based platforms, ARM based ST Micro microcontrollers, and Nordic platforms to evaluate Bluetooth performance.
- Practical knowledge of various wireless protocols such Bluetooth LE, ANT Wireless, and SMAC.
- Developed wireless application circuitry to enable low power protocols like ANT to reach distances well beyond their intended specifications.
- Experience in Android and iOS App development in C# that can interface with embedded hardware over Bluetooth LE.
- Familiar with controller protocols including SPI, I²C, Serial/UART, CAN, and many more.
- Exposure to Software Defined Networking and various networking protocols including OSPF, BGP, and others on Cisco, Juniper, and Aruba systems.
- Experience with C/C++, C#, Python, PHP, HTML, and MATLAB with exposure to VHDL, Ruby, SQL, and CSS.
- Proficient with both Windows and Linux as well as both server and embedded Linux distributions.
- Capable in production software suites including IAR EWARM, Keil uVision, Altium, Eagle, Xamarin

Android, Code Composer Studio, Photoshop, After Effects, Premiere, Acrobat, and the Microsoft Office software suite.

EDUCATION

2013 – 2015 **Georgia Institute of Technology** Atlanta, GA

- B.S. Computer Engineering
- Overall GPA: 3.14/4.0

2010 – 2012 **Southern Polytechnic State University** Marietta, GA

- Regents' Engineering Transfer to Georgia Tech for Computer Engineering.
- Overall GPA: 3.36/4.0

PROJECTS

December 2015 **Worker Safety and Monitoring System** Georgia Tech

- Designed a system for real time tracking of a variable sized array of node devices.
- The system consisted of several modules including a GPS, microcontroller, and wireless transceiver.
- Developed firmware in C/C++ for an ARM MCU embedded in a custom designed PCB.