DARREN MASCIOLI

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Summary

Emerging professional with experience in embedded software development and debugging for real world applications. Interested in post-graduate employment opportunities.

Education

University of Pittsburgh – B.S. in Computer Engineering

Pittsburgh, PA

Minor in Political Science

GPA: 3.804

Exp. Graduation: December 2020

Plum, PA

Internship

May 2018 - July 2020

3-rotation co-op,

Relevant Coursework:

Computer Networks, Practical AI, Software Engineering, Embedded Processors and Interfacing, Databases, Data Science, Algorithms, Operating Systems, Software Quality Assurance, Digital Design, Computer Architecture, Data Structures, Web Applications, Digital Logic, Computer Organization, Electronic Circuits, Digital Systems Lab, Written Professional Communications

Skills

Languages:

Tools: C, C++, Python, Java, C#, Visual Studio, Eclipse, Git, SVN, HTML/CSS, JavaScript, Jira, JUnit, Selenium, SQL Linux (Ubuntu, Debian), Server, MySQL, Flask, HDL Designer, ModelSim

Operating Systems: Hardware:

Windows (10, 7),

RTOS/ThreadX

Soldering, Oscilloscope, DMM, UART, BLE, I2C, SPI, Embedded Round Robin, 1-Wire, Modbus, Ethernet, Circuit Schematic Design

Experience Bridge Fusion Systems

SQL (Oracle, Microsoft)

Software Engineering Co-Op

- Added ethernet connectivity to track switch platform. (C, ARM STM32)
- Introduced and developed new data storage platform with SQL Server for manufacturing production database. (SQL, Python)
- Added new firmware feature to power dissipation devices to automatically prevent diesel generator wet stacking. (C, ARM – NXP)
- Implemented firmware features for streetcar track switch equipment including adding support for new SPI flash memory component. (C, ARM – STM32)
- Created additional software feature to update firmware version of multiple IoT devices at one. (C#)
- Expanded functionality of and created multiple WPF GUI applications. (C#)
- Performed multiple product demonstrations to clients to ensure correct implementation of requirements.

Projects BikerBlinker

August 2020 - Present

Senior Design Project

- Ongoing capstone project to develop voice-activated turn signals for bicycles
- Responsible for embedded firmware and wireless communication on ESP-32 (C++, BLE)

2020 NAESC Engineering Leadership Summit

Pittsburgh, PA April 2019 - March 2020

Conference Director

- Organized two-day national conference for almost 300 attendees
- Managed budget of approximately \$80,000 and communicated purpose of conference and national organization to secure ~\$10,000 worth of corporate sponsorship deals
- Facilitated virtual conference activities after cancellation of event due to COVID-19

Leadership Engineering Student Council

Fall 2017 - Fall 2020

Conference Director, Vice President, Board Member

- Work with other officers to promote academic, professional, and social development within Pitt Swanson School of Engineering.
- Attend regional and national conferences to develop and expand leadership and communication skills.

Achievements

University of Pittsburgh Dean's List

Multiple Semesters April 2019 - May 2020

Tau Beta Pi Engineering Honor Society - Vice President, Inducted Member