# 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

# 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 SQL (Oracle, Microsoft) Server, MySQL, Flask, HDL Designer, ModelSim

**Operating Systems:** Hardware:

Windows (10, 7),

RTOS/ThreadX

Linux (Ubuntu, Debian),

Embedded Round Robin,

Soldering, Oscilloscope, DMM, UART, BLE, I2C, SPI, 1-Wire, Modbus, Ethernet, Schematic design

Plum, PA

Internship

# **Experience Bridge Fusion Systems**

# Software Engineering Co-Op

- May 2018 July 2020 3-rotation 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)
- 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 circuit design and embedded firmware on ESP-32 module (C++)

# 2020 NAESC Engineering Leadership Summit

Conference Director

Pittsburgh, PA April 2019 - March 2020

- 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

- Conference director for NAESC Engineering Leadership Summit, a national conference for over 300 student leaders hosted at Pitt.
- Work with other officers to promote academic, professional, and social development within Pitt Engineering.
- Attend regional and national conferences to develop and expand leadership and communication skills.

#### Achievements

University of Pittsburgh Dean's List

Tau Beta Pi Engineering Honor Society – Vice President

Multiple Semesters April 2019 – May 2020