

GREG SCAFFIDI

Sr Embedded Software Engineer

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CAREER SUMMARY

20+ year Embedded Software Engineer and Technical Leader specializing in architecting, developing, and optimizing firmware for a breadth of **ARM Cortex** processors (M0-A75) and custom embedded systems involving **FPGAs and DSPs**. Proven ability to deliver high-performance solutions using **C, Python, and Embedded Linux/Yocto**, with a track record of **reviving struggling programs**, leading cross-functional teams, and driving significant **cost savings** and product reliability improvements. Expertise in FPGA-Firmware integration and PS/PL boundaries.

TECHNICAL SKILLS

Languages: C , Python , Assembly , C++ , JSON, Bash

Operating Systems/Environments: Embedded Linux , Yocto , RTOS , Bare-Metal Firmware , Android , Windows

Hardware/Protocols: ARM Cortex Processors , DSP , USB , BLE , SPI , I2C , GPIO , RS232 , RS485

Development/Processes: Device Drivers , Kernel Components , Root-Cause Analysis , TDD , Code Review , Refactoring , Bring-up , Defect Resolution , Unit Tests

PROFESSIONAL EXPERIENCE

RETYM, INC | Austin, TX **Embedded Software Engineer (MTS)**

Jun 2025 – Oct 2025

- Developed tools and applications using C, Python, and Bash for interfacing with a custom optical networking DSP targeting high-bandwidth AI data-center connectivity applications.
- Utilized version control system (Git) effectively to manage source code repositories across multiple branches simultaneously.
- Developed software documentation including design specifications and API references for internal stakeholders.
- Updated and extended a Windows DLL interface to the SDK written in C.
- Championed a proof-of-concept Python Ctypes interface to the DLL for testing the SDK.

AMD | Austin, TX **Linux Software Development Engineer - Specialized**

Nov 2024 – Feb 2025

- Developed Linux tools in C++ and Python for monitoring and managing AMD GPU performance in data center AI applications.
- Implemented robust solutions for bare metal and containerized RHEL and Ubuntu server-grade deployments.
- Collaborated with cross-functional teams to optimize AMD GPU performance, leading to **enhanced data center efficiency**.

OCTAVO SYSTEMS | Austin, TX **Systems & Applications Engineer**

Jun 2023 – Apr 2024

- **Drove platform modernization** by upgrading the 'meta-octavo' Yocto Linux meta-layer to the 'kirkstone' revision for the OSD32MP1-RED board.
- Developed a Python application to automate real-time component price gathering from distributors, **eliminating countless hours of manual procurement time** (Python / JSON / Web APIs).
- Created a series of Python scripts to automate and guide the process of upgrading a Yocto meta-layer from one version to the next (Python / Powershell / Linux).
- **Successfully launched** the new OSDZU3 SiP product line by extensively reviewing Marketing Documentation & Technical Collateral.

JMA WIRELESS | Austin, TX **Sr. Firmware Engineer**

Oct 2022 – Mar 2023

- **Led critical debugging efforts** for 5G SW-defined radios, ensuring timely product launch and meeting customer satisfaction goals (Linux / C).
- **Revived a struggling New Radio program** by implementing features, improving testing, and assisting with certification (Linux / RTOS / C).
- Acted as a mentor in an Extreme Programming environment with a new graduate, focusing on C, Linux, RTOS, and Git best practices.

PLANTRONICS, INC (POLY) | Austin, TX Sr. Software Development Engineer

Aug 2020 – Oct 2022

- Developed and documented production-ready firmware for Android-based USB video conferencing cameras, facilitating seamless user experience (C, Linux, USB, Android).
- **Resurrected and revitalized a legacy log analysis tool**, expanding its functionality to support new and existing products, resulting in a **significant reduction in time spent on log analysis** for debugging (C++ / Visual Studio).
- Debugged and corrected SS+ USB gadget driver implementation and USB descriptor presentation (C / Linux).

CIRRUS LOGIC, INC | Austin, TX Embedded ARM Firmware Engineer

Nov 2016 – Aug 2019

- **Delivered power and latency optimized firmware** to consistently surpass customer requirements.
- Developed FW components and standards-compliant drivers (SPI, I2C, USB, BLE, CMSIS) contributing to the successful launch of several strategic audio chips (C / Bare-metal / ARM / RTOS).
- Wrote and analyzed implicit and explicit stakeholder requirements, feeding into comprehensive designs and test plans.

INDEPENDENT CONTRACT | Austin, TX Consultant/Contractor | 2016

Jan 2016 – Nov 2016

- **TenX Precision**: Designed and implemented early-concept FW for a sensor data acquisition system, facilitating real-time data collection and transmission via an IoT-like API (Bare-metal / C / RS-484).
- **Visio Financial Services**: Rapidly prototyped data-mining software solution in Python for automation of financial and inventory data analysis and reporting.

POLYCOM, INC. | Austin, TX Senior Systems Software Engineer

Nov 2011 – Jan 2016

- **Led the successful migration** of the ARM Cortex M3 codebase to support the advanced Cortex M4 processor, resulting in **performance improvements and significant cost savings** per year (C / BSP).
- **Led a team of 4+ software engineers** in the successful on-time launch of the Centro product for the company anniversary.
- Developed fault-tolerant firmware update scheme for programming microcontroller flash, **improving product reliability** (Bare-metal / C).
- Root-caused complex system issues as part of a tiered triage team under aggressive timelines, **ensuring customer satisfaction** (Jira / Defect Analysis).

MCCI CORPORATION | Austin, TX Software Test Engineer

Mar 2008 – Nov 2011

- Assumed ownership of Wireless USB and USB 3.0 testing effort, driving a test plan that incorporated a variety of host controllers and devices to facilitate the discovery and resolution of compliance issues.
- Maintained software tool for mining Jira ITS SQL database to produce valuable performance metrics (C / C++).
- Managed Microsoft Premier Partner Account, coordinating global test effort to ensure interoperability of beta software.
- Developed, documented, and maintained procedures for deploying comprehensive test environments, timely discovering and reporting issues relating to stability, compatibility, connectivity, and performance.

SOUTHERNTIER NEWS COMPANY, Ithaca, NY Clerk (Manager in Training)

Jul 2002 – May 2007

- **Demonstrated strong work ethic and trustworthiness** by routinely handling, reporting, and depositing thousands of dollars of cash daily, and being solely responsible for opening, running, and closing the store.
- **Drove customer satisfaction** by developing and employing superior multi-tasking abilities to serve numerous simultaneous customers, each with different, often conflicting, needs.
- **Exercised management and leadership responsibility** by training and supervising subordinate employees and reporting directly to the Director of Operations.
- **Implemented a Video Surveillance System** that successfully identified covert cases of theft from long-standing regular customers, protecting company assets.

FORMAL EDUCATION

University Of Texas @ Austin: Master of Science (ECE) – Software Engineering | 2013

- *Master's Report*: <http://hdl.handle.net/2152/22713> (Android / Java / SQL / R)

State University of New York @ Geneseo: Bachelor of Arts – Philosophy | 2005