

EDUCATION

B.S. Computer Science Seton Hill University

SUMMARY OF ROLES

- Developing, deploying, and testing software for embedded and distributed systems
- Project scoping, leadership, and organization on multiple teams of different sizes
- Source control of software repositories
- Code reviewer and repository maintainer
- Creation and maintenance of CI/CD pipelines
- Lead role on various software projects
- Recruiting/interviewing technical talent

TECHNICAL SKILLS

Operating Systems: Windows, MacOS, iOS, Linux (Ubuntu, Yocto)

Programming Languages: C++, C, C#, Python, Swift, PHP, SQL, Bash, XML, HTML, Tailwind CSS

Tools: Git, Tortoise SVN, GCC, OpenEmbedded, Tera Term, iTerm, Win32 Disk Imager, Uboot, Unity, .NET, Qt, Azure, Bitbucket, Jira, DevOps, Jenkins, Docker, VirtualBox, Vercel, App Store Connect

PROFESSIONAL EXPERIENCE

Student Programmer at Seton Hill University

SHIP Student/Faculty Portal: Migration of a PHP web app from Symfony to Laravel framework

- Migration of various student and faculty facing features using **PHP** with Laravel/Filament to manipulate and present data from a **MySQL** database

Software Engineer at C Speed

Blood Pressure Medical Device: **C** and **C++** development on a **Yocto** Linux system

- Embedded software development on a **TI** am335x **ARM** platform utilizing **OpenEmbedded** tools to implement layer based Yocto Linux with the help of **GCC** cross compilers
- **Linux kernel** development including removal/modification of various drivers, creation of udev rules, adjusting kernel configs
- UI overhaul using **C++** with **Qt** graphical framework adhering to FDA usability requirements and UI/UX design standards provided by the client
- Development of an automated **bitbake** build process running on an **Azure** cloud **Ubuntu** VM using **Jenkins** continuous integration

Medical Device Service Tool: **C#** development using **.NET** framework

- Development of a **Windows** desktop **WPF** desktop application which interfaces with a medical device connected via USB
- Implementation of software security features such as dynamic **AES encryption**, password complexity policies, and automatic timeout/logout
- **Debugging** various software issues pertaining to medical device service procedures such as **firmware** upgrades, sensor calibration, and settings configuration

Infrared Thermometer Device: **C** development on a **TI** MSP430 **Microcontroller**

- Implemented feature which validated CRC values within client configuration files on the fly