Caleb Voorhees   cvoorhees44@gmail.com

EDUCATION

B.S.   Computer Science   Seton Hill University

SUMMARY OF ROLES

- **Software Engineer:** Developing, deploying, and testing embedded software for RTOS, desktop software for Windows OS, mobile applications for iOS.

- **Code Reviewer:** Critiquing and guiding interns and other software engineers making pull requests in code repositories. Developing and maintaining automated CI/CD pipelines to simplify upkeep of those repositories.

- **Technical Lead:** Project scoping, planning, and organization on multiple teams of different sizes using different development styles (Agile, Waterfall). Drafting, revising, maintaining software documentation (SRS, SDS, SBOM, etc). Interfacing with management to give updates, explain problems, brainstorm solutions, etc.

- **Recruiter:** Attendance at multiple career fairs seeking intern/entry level software and QA engineers. Holding virtual and in person technical interviews.

TECHNICAL SKILLS

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

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

PROFESSIONAL EXPERIENCE

Student Programmer at Seton Hill University (September 2022 - May 2023)
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 query and present data from a **MySQL** database

Software Engineer at C Speed (June 2023 - Current)
Patient Monitor Medical Device: **C** and **C++** development on a **TI** am335x ARM processor

- Embedded software development utilizing **OpenEmbedded** build tools to implement **Yocto** Linux using **GCC** cross compilers
- **Linux kernel** development including removal/modification of various drivers, creation of udev rules, adjusting kernel config**s**
- 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

[SOFTWARE LEAD] *Medical Device Service Tool:* **C#** development using **.NET** framework

- Development of a **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
- Development of a **unit test** suite for the core application in **Visual Studio**

Infrared Thermometer Device: **C** development on a **PSOC** 4 ARM Cortex M0 **microcontroller**

- Implemented a feature which executed CRC checks on configuration data being sent to the device. Developed following the device's interface design specification