

## EDUCATION

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B.S. Computer Science Seton Hill University

## SUMMARY OF ROLES

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- **Software Engineer:** Developing, deploying, and testing embedded RTOS software, Windows desktop software, iOS mobile applications, and cross-platform web applications.
- **Technical Lead:** Scoped and planned projects using both agile and waterfall, maintained documentation (SRS, SDS, SBOM, etc.), and frequently interfaced with both management and clients.
- **Engineering Recruiter:** Represented a company at multiple career fairs and conducted technical interviews.

## TECHNICAL SKILLS

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**Programming Languages:** C++, C#, C, Python, Swift, Javascript, PHP, Bash, Powershell

**Tools:** Git, Tortoise SVN, Azure, TFS, DevOps, Visual Studio, VSS, WSL, Jira, GCC, CMake, Uboot, Bitbake, SSH, Win32 Disk Imager, PSOC, Tera Term, iTerm, .NET, React, Qt, Jenkins, Docker, VirtualBox, Vercel, SQLite

## PROFESSIONAL EXPERIENCE

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### Radar Software Engineer at C Speed [March 2025 - Current]

- *Light Wave Radar:* **C** and **C++** development for a **RTOS**
  - Creating a **SQLite** database interface which receives, organizes and stores high frequency data streams from multiple sources.
  - Adding a **TCP** socket communication layer to multiple applications enabling bidirectional communication between multiple machines on a **LAN**
  - Development of test server **powershell** scripts used to run data processing software in a vacuum and check output using binary comparisons. Automated this process using **Gitlab pipelines**.
- *Web-based Air Situation Display:* **Javascript** development using **React**
  - Parse **ASTERIX** messages to extract multiple categories of plot data and play back hours of radar, ADS-B, and tracker recordings in real time
  - Integrated **DeckGL**, a React library which utilizes GPU hardware to maximize performance in web apps that demand fast real time graphics

### Design Services Software Engineer at C Speed [June 2023 - March 2025]

- *Patient Monitor Medical Device:* **C** and **C++** development for a **Yocto** embedded OS
  - **Linux kernel** development including removal/modification of various drivers, creation of udev rules, and adjusting kernel configs
  - Application 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 **WPF** desktop application which interfaces with medical devices via USB connection
  - Implementation of software security features such as dynamic **AES encryption**, password complexity policies, and automatic timeout/logout
  - Development of a **unit test** suite for the core application in **Visual Studio**

### Student Programmer at Seton Hill University [June 2022 - June 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