

Seth Lenhof

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Experience

Lockheed Martin

Software Engineer

September 2025-Present

- Led development of HLA integration into the Pilot Training Aid simulator, enabling new use cases across multiple internal simulation products
- Act as primary software engineer and SME for simulation networking and software development within the team
- Refactored core simulation systems, improving application performance by 20% and reducing runtime overhead
- Diagnosed and resolved DirectX 12 GPU memory leaks, improving rendering stability and performance under high load
- Implemented and optimized multi-threaded simulation update pipelines for entity synchronization and network communication
- Improved rendering pipeline by fixing shader issues and enhancing all graphical output

Software Engineer Associate

January 2025-September 2025

- Continued development on the Pilot Training Aid desktop simulator in C++
- Refactored and improved vital subprocesses to allow for 50% improvement in launch speed
- Improved CI/CD pipelines by integrating SonarQube and Fortify, improving code quality and security
- Led research development to implement HLA with MAK RTI into Prepar3D, Simulation Engine

PTA Software Engineer Intern

May 2024-December 2024

- Led winning team RMS TLS intern project to revolutionize business with new technologies
- Contributed to 2 new feature efforts for the Pilot Training Aid desktop simulator in C++
- Created testing scenarios to allow for regression testing of the new capabilities, as well as updating requirements documentation to match features
- Developed a C# ASP.NET web app for launching of courseware, and attended cross-functional meetings to ensure 100% compatibility and integration with current configurations

Web Software Engineer Intern

May 2023-May 2024

- Led intern project team as scrum leader and software developer to develop a robot capable of extracting information from hostile zones
- Utilized Java, Typescript, and XHTML to develop scheduling website for training systems
- Implemented threading to allow background export of schedules and reducing time for export by 20%, for better user experience

Projects

Itemize

September 2024

- Built a SwiftUI app for receipt scanning and item extraction using AI-based parsing
- Integrated ChatGPT API for data categorization and recipe generation
- Developed backend integration for cloud storage (PHP)
- Delivered functional product in a 36-hour hackathon team of 3

Education

University of Central Florida, 3.515 / 4.0 GPA

December 2024

Bachelor of Science in Computer Science

Skills

Languages: C++, C#, Python, Java, TypeScript, JavaScript, SQL

Simulation & Graphics: DirectX 11/12, Prepar3D, HLA, DIS, real-time systems, multithreading

Frameworks/Web: React, Angular

DevOps: Docker, CI/CD, SonarQube, Fortify

Tools: Git, Jira, Linux, Windows

Certifications: CompTIA Security+