Paul Amonson

Target Location Remote or Spokane, WA | Hillsboro, OR 97124 | paulamonson@gmail.com

Summary

Accomplished Senior Software Engineer with over 30 years of experience designing and implementing software across diverse platforms, including Unix/Linux, Windows, and Mac/iOS. Proven expertise in middleware development, server-side components, Linux services, and GUI tools. Adept at optimizing cloud software for performance, developing scalable HPC control systems, and contributing to industry standards. Proficient in Java, Python, Swift, C++, and more, with a strong focus on Agile methodologies and test-driven development. Recognized for driving innovation, fostering cohesive teams, and delivering high-quality, secure, and efficient software solutions. Passionate about leveraging emerging technologies to meet and exceed business objectives.

Core Proficiencies

- Cloud Optimization
- Programming Expertise
- Middleware Development
- ❖ Software Design & Architecture
- Team Collaboration & Leadership
- **❖** High-Performance Computing (HPC)

- Data Engineering & Analysis
- Cross-Platform Development
- Personal Growth & Innovation
- ❖ Security Standards & Compliance
- ❖ Agile & Test-Driven Development
- Development Tools & Frameworks

Professional Experience

Software Engineer and Senior Software Engineer Intel Corp

2002 to 10/2024

1990 to 2001

As a Software Engineer and Senior Software Engineer, I was responsible for designing, developing, and maintaining software applications, ensuring high performance and scalability.

- ❖ Enhanced cloud software performance by optimizing open-source libraries like PostgreSQL and Velox/Gluten for Intel architecture within the AWS team, driving improved performance and scalability. Employed profiling tools, including flame graphs, and developed test harnesses to ensure consistent and reliable outcomes.
- ❖ Designed and scaled a Unified Control System for High-Performance Computing (HPC) environments, overseeing data collection, transformation, RAS event management, and storage for a large number of nodes. Used Java and Python to implement control and analysis features, delivering a responsive and dependable system for internal use.
- ❖ Played a pivotal role in developing low-power data transfer standards by contributing to the ECMA working group, establishing technical requirements, and aiding in the creation of a ratified specification. Led the architecture and security evaluation of Intel's implementation, ensuring the platform's feasibility and compliance with security standards.

Software Engineer Previous Employers

As a Software Engineer, I was responsible for designing, developing, and testing software applications, ensuring they met both functional and performance requirements.

- ❖ Engineered and enhanced software solutions for internal systems, improving processing speed and reducing server load, leading to faster response times and a better user experience.
- Streamlined key manual processes by developing automation scripts and tools, reducing operational overhead and enabling team members to focus on more impactful tasks.
- ❖ Directed troubleshooting initiatives for critical software issues, resolving problems under tight timelines and minimizing system downtime, ensuring smooth business operations.

Personal Growth

This section describes what I do on my personal time for growth. This section only contains the last 1-2 years only. These can be shared for review in separate review meetings (they are not yet open sourced).

SwiftData/SwiftUI Multiplatform Daily Food Planner with Nutrition Details; This application was designed to run on iOS and MacOS. This was written for my personal use and will not be published. It leverages CloudKit for data access across all supported platforms. ❖ CoreData/SwiftUI Shopping Application; There 2 variations of this application. The first which I published in November 2024 and uses CloudKit to share between devices on a single account. The second and newer version leverages a Redis client library and a server running on a Tailscale (https://www.tailscale.com/) private network to allow multiple users regardless of Apple IDs. It mimics CloudKit in that changes on one device show up moments later on other devices. This will not be published to the general population due to Redis management costs

Education

BS in Computer Science (with a Minor in Math) from the University of Idaho year Details can be divulged upon request.

1990

Personal

Interests include reading technical journals/blogs, developing OSS software (https://www.github.com/paul-amonson), bowling, watching good sci-fi movies, long drives, playing board games, and cooking.