

Senior Software Engineer

- Proficient in Angular, Nodejs, Java, Python, SQL, and NoSQL
 - Full Life Cycle Real-Time Embedded Avionics Simulation Software Development – 10 years
 - Development of high-volume telephony billing system applications – 2 years
 - Experience with C, C++, Ada and Object Oriented Programming – 8 years
 - Experienced team leader – 5 years
 - Solid understanding of computer science fundamentals
 - Known for having excellent communication and presentation skills
 - A passionate life-long learner seeking a new challenging career
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Education

University of California at Santa Barbara, 1981. Bachelor of Science, Mechanical Engineering.
University of Washington, 1983. Engineering Post Baccalaureate Studies (Computer Science)
University of Kansas Continuing Education, 2009. Aerospace Short Course – DO-178B
RTCA Continuing Education, Washington DC, 2014. Short Course – DO-178C
Western Governor's University, Master of Education in Progress – 75% complete 2017
Coding Dojo – Full Stack Web Development Bootcamp - 2018

Projects

<https://github.com/CThurnauSWEng/LearnSongs.git>
<https://github.com/CThurnauSWEng/quoteRanks.git>
<https://github.com/CThurnauSWEng/petshelter.git>

Professional Experience

The Boeing Company:

Avionics Software Federal Aviation Administration (FAA) Authorized Representative (AR) (3/2010 to Retirement 12/2014):

Reviewed supplier certification plans, design, requirements, test procedures, and results for completeness, correctness and use of best practices.

Worked closely with supplier engineers to resolve technical and process problems.

Provided mentoring to 4 ARs in training, leading to their acceptance as ARs.

Provided project status briefings to the FAA.

Performed on-site auditing of supplier development and integration activities.

Supported 9 avionics projects.

Avionics Software Engineer (5/2006 to 3/2010)

- Reviewed certification plans, design, requirements, test procedures, and results for completeness, correctness and compliance to DO-178B and Boeing standards.
- Provided project status briefings to the FAA.
- Performed on-site monitoring of supplier development and integration activities.
- Supported 7 avionics projects.

Electric Lightwave, Inc., Vancouver, WA – Senior Programmer/Analyst
12/1997 to 10/2000

- Project management, analysis, implementation, test and deployment of high-volume message processing applications in multiple languages on multiple platforms.
- Implementation of significant system level improvements based on “big picture” understanding of the complete message processing and billing systems.
- Built an extensible and scalable system from scratch to replace an obsolete system.
- Maintained customer order and billing systems in C and C++ utilizing Oracle and Userbase databases executing on VAX and UNIX.

The Boeing Company – Software Engineer
12/1984 to 10/1997

F-22 Avionics (8/1992 to 10/1997):

- Technical leadership of a team of 3 software engineers.
- Full life-cycle development for simulations of target aircraft, missiles, and ground objects, sensors and navigation aides in Ada.
- Technical SME for complex simulation of 400 targets.
- Integration test planning and execution.
- Development of configuration management processes.
- Participated in a successful level 3 SEI CMM audit as one of several subject matter experts.

777 Airplane Information Management System (AIMS) (7/1990 to 8/1992):

- Analyzed requirements for the gateway interface system for the Boeing 777 AIMS.
- Reviewed subcontractor designs, documentation, development processes, and schedules.
- Performed on-site monitoring of supplier development activities.

ATF and B-1B (12/1984 to 7/1990):

- Full life cycle software development of real-time embedded avionics for the Advanced Tactical Fighter Demonstration/Validation program and the B-1B Weapon Systems Trainer.