Albert Tran

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Profile:

Experienced Software and Radar Development Engineer with a proven track record in leading cross-functional teams and implementing innovative solutions for aerospace and technology projects. Proficient in diverse programming languages, web and API development, embedded systems, and radar technologies, complemented by strong leadership and mentoring skills

Professional Experience:

Software Engineer **RevaComm** Honolulu, HI **2021 - Present**

- Implemented React.js, C#, and Dot.net to enhance the metrics system monitoring the health status of applications deployed across multiple Kubernetes clusters, used for Federal Medicaid and Medicare services
- Developed two Python applications for Information Technology team, streamlining the help desk service process and improving the speed for addressing daily customer issue tickets by 20%
- Architected a technical documentation website using HUGO for enterprise-level CI/CD system, serving as hosting platform for customers' static websites. This website is utilized daily by the entire organization and external customers.
- Led a team in implementing core components using the Grapes.js framework and OAuth2PKCE for a content management system application integrated within a CI/CD system. This enabled customers to create website content without coding, build its GIT repository, and deploy the site in under 15 minutes.
- Refactored core features in a full-stack website designed for onboarding thousands of new members within the organization. Leveraged the latest technologies such as JavaScript, Vue, Express, Node, Sequelize, and Docker
- Assisted in drafting technical sections of proposal reports, conducted interviews, and mentored software engineer interns

Software & Radar Development Engineer **Raytheon Technologies** Tucson, AZ **2003 – 2021**

- Led a team of engineers in integrating and testing the standard missile software program, successfully conducting Flight Qualification Test (FQT), and collaborated with senior system engineers to formalize the release of the software product
- Developed an automation test framework utilizing Jenkins and Raytheon Missile Test Suite to automate scenario runs, telemetry collection, and analysis presentation generation for FQT scorings, resulting in a 30% improvement in software verification.
- Collaborated directly with the Chief Engineer and senior DSP engineer in an innovative R&D project to implement advanced DSP algorithms using MatLab and C++ to process large video datasets for geolocation. Helped to write a BOE for the project funding which led to winning a million-dollar DARPA contract. As a project team lead, utilized scrum methodology to create and maintain product backlogs for the development team.
- Played a pivotal role in developing RTOS embedded software for two general-purposed radar testbed systems that can support different radar applications. One of the testbed systems was successfully used to demonstrate real-time Synthetic Aperture Radar (SAR) maps operation which led to securing additional program funding.
- Refactored a large missile software codebase to implement a standalone prototype program to perform different advanced Radar and sensor algorithms, and successfully conducted radar demo flight tests. Also redesigned an existing missile simulation program to test the new algorithms and analyze software performance in the lab environment.
- Wrote a software requirements specification for standard missile's BIT test, implemented BIT features using C++, and successfully conducted missile BIT tests in the field.
- Developed numerous C++ programs using OOP concepts and VxWorks Board Support Packages (BSP) to implement a wide range of features for different missile programs, including establishing data communication (TCP/IP, UDP, VME, Fiber), creating multi-threads via tasks spawning, configuring interrupts/semaphores, managing data sharing, telemetry collection, time alignment among PowerPC processors, and executing DSP and radar algorithms

TECH Talk – Aerospace Software Development **University of Hawaii** **2023**

- Presented to computer science students and faculty, discussing software development for advanced air defense systems such as embedded programming, software architecture, the software development life cycle, and various testing types

Education:

M.S. Electrical Engineering (GPA 3.61) **University of Southern California** **2001 – 2003**

B.S. Electrical and Computer Engineering **University of California, Los Angeles** **1996 – 2001**