

**STRATEGIC CONSULTANT – SOFTWARE ENGINEERING | MEDICAL SOFTWARE & SYSTEMS**

SOFTWARE ENGINEERING SERVICES ■ STANDARDIZED PRODUCTS & CUSTOM SOLUTIONS ■ CLIENT ENGAGEMENTS

- **Skilled in managing large, complex software implementations**, deployments, and client services for diverse industries
- **Offer medical device and software deployment consulting services** for innovative medical companies and support new device development during clinical trials and global market introductions with complete expertise in regulations and laws

**A seasoned software engineer with 30+ years** of experience in offering a unique blend of multi-dimensional industry and operational expertise, combined with business, process, and technology strategies. Track record of improving bottom-line and marketplace success, through real-world data, innovative insights, and strategic portfolio & product strategies.

- ☑ **Subject matter expert** of software development and implementation life cycle, including requirement analysis, design & implementation, estimations, and other aspects of development methodologies
- ☑ **Proficient with** embedded systems development, regulations & laws about medical device standards, building high-end medical device software, and scientific & evidence-based approaches to fix errors and maintain medical applications
- ☑ **Collaborate** with architects to design flexible, scalable, maintainable solutions; with business analysts to understand and implement complex business functionality; and with Project Management, and QA personnel to ensure delivery of solutions
- ☑ **Adept** at validation, optimization, and improvement of organizations' current software implementation/deployment/client services process - Accomplish assessment criteria and presentation of findings with process improvement recommendations
- ☑ **Demonstrate strong** analytical thinking and problem solving skills while evaluating stated requirements and expectations in terms of technical feasibility & cost, organizational priorities, and outcomes

**CORE COMPETENCIES**

- ◆ Medical Device Development Standards
- ◆ Multilevel Project Management
- ◆ Total Quality Management (QSR A20 / IEC 62304)
- ◆ Software Development Life Cycle & Testing Strategies
- ◆ IT Strategy & Governance / Process Optimization
- ◆ Systems Integration / Troubleshooting & Resolutions
- ◆ Strategic Partnership / Alliances
- ◆ Change & Transition Management / Leadership

**PROFESSIONAL WORK HISTORY**

**SENIOR CONSULTANT, PROCESS IMPROVEMENT | VERASONICS, INC.**

**JANUARY 2014 – PRESENT**

**Perform a key consultative role** and provide leadership to manage complex multi-dimensional systems and key accounts. Lead the delivery of software application functionality, assist in architecture concepts, and provide high-level designs regarding the software application including supporting process improvement initiatives. Provide unique oversight in the interpretation of IEC-62304 standards, while using the most productive software engineering practices.

- ◆ **Establish effective software build and release process**, slashing accumulated technical debt in the process
- ◆ **Direct and steer process improvements** to meet regulatory standards (Medical Device Development Standards)
- ◆ **Audited software departments** with regards to **QSR 820 and IEC 62304** standards, write/review/adjust SOPs for software departments, perform software risk analysis, and validate the production of software
- ◆ **Provide critical expertise** and innovation in setting project direction, owning the accountability of the quality and timeliness of the software application project delivery (**Produced high-quality software releases within a 2 week period**)
- ◆ **Key Achievement:** *Contribute to 30% organizational growth by leading process improvements in software departments*

**PRESIDENT | COMMON SENSE SYSTEMS, INC. - WOODINVILLE, WASHINGTON**

**1996 – PRESENT**

**Lead and manage** the technical support and software engineering functions, through performance coaching, project planning, and goal setting aligned with the business plan. Perform research, prepare presentations, and report recommendations & technical analysis of the client's software systems and processes, with senior leadership.

- ◆ **Grew business through** building solid relationships with client organizations, managing a staff of 15 professionals, and assuming full P&L responsibilities - Provided software engineering services in the Puget Sound region of Washington State
- ◆ **Support embedded software development** for life critical devices while delivering regulated software products
- ◆ **Maintain integrity** of assigned components during the entire life cycle within the integrated, technical environment
- ◆ **Through continued advanced education** in software engineering management, refocused the business on consulting in Theory of Constraints (TOC) work - **In 2005 & 2006**

**PROFESSIONAL WORK HISTORY CONTINUED ...**

**DIRECTOR OF GLOBAL QUALITY | SONOSITE, INC. - BOTHELL, WASHINGTON**

**1996 - 2014**

**Administered tactical leadership since April 2013**, as the **Director of Global Quality**. Remain responsible for application software installation, implementation of software product / solutions, testing, training, off-site support and troubleshooting. **Reported directly to the CEO**, while managing a staff of **35+** and full P&L management responsibility of **\$4.8M+**. Conducted detailed analyses of the performance attribute of applications using emulation, measurement, and analysis techniques.

- ♦ **As a contract software engineer since 1996**, ensured quality and accuracy of the embedded software, which provided video clip capture, playback, and JPEG conversion on the MicroMaxx platform
- ♦ **Maintained long-term 15+ year partnership with Sonosite since inception** by consistently delivering value and supported organization to become a Billion dollar organization
- ♦ **Successfully deployed** embedded software infrastructure for the 180 and iLook platforms, including but not limited to interrupt service routines, heap management, tool chain integration & support, and system device drivers

**Key Achievements:**

- **Devised** the video cassette recorder subsystem & the compact flash management subsystem used on the Titan and MicroMaxx systems, and led the software test effort for the MicroMaxx 3.0 product
- **Successfully managed** the deployment of the recursive make system used to build the embedded system software, along with the basic scan head software architecture used in all SonoSite systems
- **Spearheaded efforts** to create the software-licensing model used for licensing system software and system options, along with software upgrades, V&V procedures

**APPLIED MICROSYSTEMS, INC. - REDMOND, WA**

**1990 - 1996**

**SOFTWARE ENGINEERING MANAGER (1993 - 1996) | SENIOR SOFTWARE ENGINEER (1990 - 1993)**

**Leader of high profile projects**, and managed project teams that included 17 engineers. Successfully implemented company's globalization processes with a focus on continuous improvement practices. Strategically focused on internationalization, globalization, localizability, and localization processes. Provided oversight in corporate strategic planning and skilled recruitment.

- ♦ **Project managed** the product-launch process, and oversaw launch readiness and SOPs that resulted in higher client satisfaction and increased communication information
- ♦ **Advised company's products and services** globalization plan for short and long-term strategies
- ♦ Designed and delivered productivity improvement proposal, lifecycle presentations, and staff quality development methods

**Key Achievements:**

- **Pioneered the launch** of 1<sup>st</sup> Sparc-based & Windows 3.1-based, MWX-ICE symbolic debugger products, which helped create revenue opportunities of more than **\$5M per year in new debugger functionality**
- **Implemented key components**, such as Win32s 16/32-bit "Universal Thunk" layer access to the communications subsystem, as well as new C++ implementations of Applied's Ethernet and high-speed parallel (Modified SCSI protocol) communications subsystems
- **From 1990 - 1993, led** "Disassembler Group," a 5-person team, to innovate products for memory and (primarily) trace disassembler technology - Used Artificial Intelligence research in heuristic search & truth maintenance systems

**ADDITIONAL WORK HISTORY**

**SYSTEMS ADMINISTRATOR**

*APPLIED MICROSYSTEMS, INC. - REDMOND, WA*

**1989 - 1990**

**SYSTEMS PROGRAMMER III**

*THE UNIVERSITY OF WASHINGTON - SEATTLE, WA*

**1985 - 1988**

**SOFTWARE ENGINEER**

*THE OFFICE MANAGER, INC. - BURIEN, WA*

**1983 - 1985**

**EDUCATION**

**Washington State University, Pullman, WA**

**2004**

— **Completed (2) graduate classes in Engineering Management | GPA 4.0 | Certified as a Theory of Constraints "Jonah"**

**The Ohio State University, Columbus, OH**

**1983**

— **Bachelor of Science (B.S.) Computer & Information Science**

**PROFESSIONAL AFFILIATIONS**

*Institute for Electrical & Electronic Engineers (1983 - Present) | Educational Society for Resource Management (APICS) (1983 - Present)*  
*Association for Advance of Medical Instrumentation (2005-Present) | Theory of Constraints Int. Certification Org. (2004-Present)*  
*Attended TOC-ICO conference in Barcelona, Spain, in November, 2006*