

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, EMBEDDED SOFTWARE | 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 1st 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