JASON BAIETTO

CHIEF SYSTEMS ARCHITECT

jason@baietto.com | Coral Springs, FL, USA | latest resume: jason.baietto.com

CAREER SUMMARY

Software development leader with 25 years of experience building and directing the engineering organization behind a commercially shipped real-time Linux product ecosystem. Deep technical roots in kernel-level and embedded Linux paired with a sustained record of delivering mission-critical software for defense, aerospace, and government customers. Known for owning complex product portfolios end to end and executing reliably over the long haul.

EDUCATION AND CERTIFICATION

Bachelor's degree | Computer Science | University of Wisconsin, Madison 1988
Bachelor's degree | Philosophy | University of Wisconsin, Madison 1988
Bachelor's degree | Psychology | University of Wisconsin, Madison 1988

CORE COMPETENCIES

Engineering Organization Leadership | Technical & Product Roadmap Strategy | Real-Time & Embedded Linux Development | Multi-Architecture Platform Development | Product Lifecycle & Release Management | Defense & Aerospace Program Delivery | Long-Lifecycle Sustainment & Customer Retention | Linux Distribution Integration | Developing & Delivering Technical Presentations | AI-Assisted Software Development

WORK EXPERIENCE

Chief Systems Architect | Concurrent Real-Time | Pompano Beach, FL 2001 - Present

- Championing the ongoing investigation of safely applying Claude AI to Concurrent development
- Directed the full release lifecycle for RedHawk Linux and its product ecosystem, driving 250+ production releases over two decades (2001–2026) across beta, gold, and incremental update stages with consistent on-schedule delivery
- Managed releases spanning multiple CPU architectures and a broad hardware base including iHawk servers, and NVIDIA Jetson, NVIDIA DRIVE, NXP, and Zynq UltraScale+ embedded platforms
- Championed a multi-product portfolio beyond the core OS, including Architect, KVM-RT, HA-NFS, RTS Hypervisor, Linux Cluster Manager, and the NightStar and MAXAda developer tool suites
- Delivered and sustained mission-critical builds for major defense, aerospace, and government customers, including Lockheed Martin, Raytheon, NASA, Draper Labs, Princeton Plasma, and UTC Aerospace, including multi-year quarterly update cadence supporting long-lifecycle deployed programs
- Integrated and validated releases against evolving upstream distributions, including RHEL, CentOS, Rocky, Oracle, Ubuntu, and Debian, and coordinated a steady stream of hardware enablement add-on drivers, including NVIDIA, CUDA, Mellanox InfiniBand, Intel NICs, Realtek NICs, and RAID controllers
- Conceived, designed, developed, deployed, and maintained ANTS, a sophisticated nightly test system
- Managed the full process of porting Concurrent's proprietary real-time features into open-source Linux
- Implemented key real-time features in the RedHawk kernel
- Implemented key user-level commands for RedHawk Linux
- Championed, released, and maintained a wide variety of technical documentation
- Championed, developed, and presented a FOSS-safety training course to all Development engineers
- Created and delivered dozens of in-depth technical presentations to Sales and many customers

Lead Software Engineer | Metro Link | Fort Lauderdale, FL 2000 - 2001

- Drove the Linux porting effort on various set-top-box platforms; wrote Statement of Work and Functional Requirements Specifications and contributed to boot loader, core kernel, and device driver analysis
- Integrated, validated, and deployed an embedded Linux distribution
- Developed, validated, and deployed a downloadable time-limited X server demo
- Developed, validated, and deployed an X server resource usage analysis and summary tool
- Ported GCC-based cross development tools for PowerPC and MIPS embedded platforms
- Developed FrameMaker-based documentation templates for various technical specifications

Chief Scientist | NextGen Technologies | Alpharetta, GA 1999 - 2000

- Researched technologies to enable the migration of messaging engines to multiple host platforms
- Researched host configuration techniques to achieve maximum availability

Principal Staff Engineer | Motorola | Boynton Beach, FL 1996 - 1999

- Performed high-level design for a high-tier wireless communicator with separate application and base-band processors, primarily intended for wireless Internet browsing
- Worked with the EPOC RTOS using both the MS Visual C++ development environment and GNU C++
- Prototyped techniques for dynamically adding custom advertising to existing web content, implement a proxy server with the Apache web server
- Designed and implemented a small and lightweight C-based RTOS for one-way alpha-numeric pagers and ported it to both 8-bit and 16-bit processors; this RTOS shipped in two successful products
- Made extensive customizations and extensions to an internally developed RTOS written entirely in MC68HC08 assembly; this RTOS shipped in four successful products
- Designed and implemented a generic keyboard device driver
- Designed and implemented a project build scheme using gmake that worked on Unix and Windows
- Drove documentation consistency by developing FrameMaker templates and automated FrameMaker-to-HTML conversion

Lead Software Engineer | Harris Computer Systems | Pompano Beach, FL 1989 - 1996

- Added DWARF debug support to the Harris C++ compiler
- Multithreaded a C performance analysis library
- Designed and implemented a low overhead performance analysis mechanism for a Unix based RTOS, utilizing both C and PowerPC assembly
- Designed, implemented, documented, released, and maintained the NightTrace real-time performance analysis tool, consisting of 70K lines of C++ code utilizing a graphical toolkit from Stanford
- Taught many NightTrace classes to analysts and customers
- Presented countless NightTrace demonstrations
- Converted a K&R based C compiler, libraries and headers to be ANSI C compliant
- Maintained a C compiler front end and development environment
- Designed and implemented an integrated C source listing generator

PROFESSIONAL DEVELOPMENT

Safely Using Free & Open-Source | Concurrent | Pompano Beach, FL 2022

Automotive Safety Training | TÜV Rheinland | Pompano Beach, FL 2017