James R. Arthur

imjarthur@gmail.com

OBJECTIVE: Seeking a senior leadership role to drive team excellence, optimize development workflows, and deliver scalable and high-impact software solutions.

SUMMARY

- Experienced technology leader with a track record of successfully managing global software development teams, driving the on-time, on-budget delivery of high-quality software solutions.
- Expert in systems engineering, specializing in stakeholder engagement, system architecture, requirements definition, and interface design.
- Full-stack software development expertise, combining hands-on coding with technical leadership to deliver robust, high-performance production software solutions.

TECHNICAL SKILLS & EXPERTISE

- Software Architecture & Development: Microservices, Cloud-Based Applications (Azure), SaaS, Multi-Tenancy, Event-driven architecture,
- Frontend Frameworks & Technologies: Angular, TypeScript, HTML, CSS, Single Page Application (SPA)
- Backend Programming Languages & DB Technologies: C#, .NET, C/C++, Java, SQL, Reddis
- Tools & Platforms: Kubernetes, Docker, Kubernetes, Git, Azure, MinIO, VerneMQ, RabbitMQ
- Development Tools & Version Control: Git, GitHub, Visual Studio, VS Code
- Project & Process Management: Agile (Scrum/Kanban), Waterfall, Jira, Application Lifecycle Management (ALM)
- Testing & Quality Assurance: Unit, Interface, Component, System Testing, Moq, Automated Testing

WORK HISTORY

TERUMO BLOOD COMPONENT TECHNOLOGIES, Lakewood, CO **Nov 2015 – Present**

Software development manager, principal software systems engineer, project/team lead, and system engineering roles developing medical regulated software systems for Terumo BCT. Terumo BCT is a global leader in blood component, therapeutic apheresis and cellular therapy technologies.

Software Development Manager (Aug 2021 - Present)

- Led a 15-member software team, overseeing hiring, performance evaluation, and career development.
- Managed resource allocation and budgeting across 15 global teams over 10+ software projects, aligning with fiscal year plans.
- Defined and executed technical strategies for multiple high-impact projects, leading critical discussions, mitigating risks, optimizing execution workflows, and driving backlog prioritization
- Led strategic recruitment efforts for software development roles, identifying and hiring top talent, with multiple hires advancing into leadership positions
- Initiated and provided oversight for the development of a next generation microservice platform, guiding architectural direction and ensuring alignment with business objectives.
- Drove the implementation of a company-wide software metrics and data insights initiative, enabling real-time performance visibility for 25+ teams and enhancing project-level analytics for data-driven decisions.
- Established and led the annual Software Internship Program, recruiting and mentoring up to five interns per year, providing hands-on experience in real-world software projects.

Principal Systems Software Engineer (Nov 2015 – Aug 2021)

- Led two full-scale remote development teams (20+ engineers) to build a multimillion-dollar web-based application for configuring, collecting data, and tracking materials in a suite of cell therapy devices.
- Defined system architecture, requirements, and interfaces, eliciting stakeholder needs, modeling system behavior, and managing risk as a Software Systems Engineer.

- Owned product vision and backlog management as an Agile Product Owner, prioritizing stakeholder needs and leading sprint planning, demos, and backlog refinements.
- Recruited, mentored, and managed team members, overseeing onboarding, goal setting, and performance evaluations.
- Developed and executed risk management strategies, leading a team of risk engineers to remediate a design FMEA for a Class II medical device, ensuring compliance with ISO 14971:2012.
- Led successful customer deployments in China and Vietnam, launching a fleet of medical apheresis devices and an integrated software system for routine use trials.

GENERAL ELECTRIC – Oil & Gas Division, Minden, NV Feb 2011 – Nov 2015
Various software engineering roles from individual contributor to team and project lead roles for GE – Bently Nevada, the global leader in developing instrumentation and systems that monitor vibration in rotating equipment found in oil, gas and electric power generation industries. These systems are used to protect and shutdown large, complex, multi-million-dollar machinery assets such as gas and steam turbines.

***Team Lead Software Engineer* (Dec 2013 – Nov 2015)**
- Led two Scrum teams (10+ engineers) in rewriting a 20+ year-old legacy system for detecting adverse vibrations and automatically shutting down gas/steam turbines.
- Provided technical leadership to a Scrum team (5+ engineers) within a global unit of 18 teams, developing System1, a leading industrial condition-monitoring software.
- Developed high-quality production software, writing unit, integration, system, and smoke tests, conducting code reviews, and managing builds through gated/non-gated pipelines.
- Authored feature-level design documents approved by architects, detailing design/testing trade-offs, failure modes, mitigations, architecture, component reuse, and compatibility concerns.
- Reviewed and approved team member's technical designs, ensuring adherence to architectural standards and robust test strategies before development execution.

***Software Engineer* (May 2011 – Dec 2013)**
- Developed a long with a 10+ member international team, maintaining and enhancing condition monitoring and protection software applications, resolving bugs, and providing direct customer support.
- Developed configuration and data retrieval software for the industry's first continuous industrial motor monitoring system, working cross-functionally with hardware, firmware, and systems engineers from concept to deployment at customer sites.
- Dispatched to London, UK, successfully diagnosing and resolving a critical system issue, saving the customer an estimated $75,000 per day.

***Software Engineering Intern* (Feb 2011 – May 2011)**
- Developed a real-time mobile application POC alongside a team of three interns, enabling plant managers to monitor machinery status instantly, improving operational visibility and decision-making.

INTERNATIONAL GAMING TECHNOLOGIES (IGT), Reno, NV Mar 2010 – Dec 2010
***Software Engineering Intern* (Mar 2010 – Dec 2010)**
Worked for the global leader in computerized gaming machines, specifically on the Multiplayer-Series gaming systems. Duties included troubleshooting defects, enhancing software functions, maintaining a networked system test bed, and setting up numerous systems for G2E, the world's largest gaming show.

EDUCATION

Master's, Systems Engineering, Georgia Institute of Technology, Atlanta, GA (2015)
BS, Computer Science; Minors: Mathematics & Business Administration, University of Nevada, Reno (2011)