SOFTWARE ENGINEERING MANAGER

Summary

Experienced software engineer, and hands-on engineering manager with 20+ years of product development experience in broadcast media, and 10+ years of experience in leading development teams (20+ engineers), hiring (10+ offers, 40+ interviews), HR personnel procedures, performance reviews, and project transitions.

Experience

09/2009 to Current

Software Engineering Manager Company Name ï¼ City , State

- Visual C++, Windows, OOP, STL, WinAPI, MFC, threads, ATL, IPC, FTP, TCP, HTTP, XML, JSON, services, web services, REST API, SOA, media formats and standards, codec SDK, MPEG-DASH, API design and documentation.
- BCD spinoff as Imagine in 2013) Nexio video servers and applications run in various nodes of Nexio LAN to facilitate collaborative video broadcast workflows.
- Media comes from proprietary SAN or generic storage off NAS.
- Development and team management, Nexio servers' applications, Playout business unit: Led team of 22 developers from Burbank (6), Naperville (8), and Beijing (8 indirect), introduced peer reviews, repurposed components, and all 3 teams collaborated as one large team, and leading team of 3 to 6 from Burbank since 2014, adopted Scrum (ScrumMaster), facilities right-sized, and released deliverables for Nexio Software Suite 6.0, 7.0, 8.0 and Global Proxy Suite 2.5, 3.0, 3.5.
- Team handles vendor communications for codec level customer issues, and team migrated source revision control to Mercurial, Jenkins, 30+ products.
- Published functional, REST API, and URI specification document for Hercules web service, and 10 JSON protocol API documents for 3rd party and in-house use.
- Selected hands-on projects include: Service-oriented architecture: Initiated, architected and executed SOA from concept to completion to facilitate centralized web client opportunities, and 24/7 service models, and team delivered 2 web services, 10 services, 5 desktop clients, and 3 web client pages for essential functions including media playback, metadata access, proxy management, and two-domain content management.
- Hercules web service for web player solution based off MPEG-DASH: Created complete backend C++ engine to process URI, provide dynamic HTML5 player page, JavaScript source based off dash JS, handle "ready to go" and "just in time" sources, and deliver segmented MP4 atoms (H.264, AAC), and team helped with providing C# web service framework, CLI bridge layer, and device testing.
- JSON services on TCP stack using C++ as part of SOA: Created header only parser on top of "rapid json" for SAX style reader, multi-threaded server side API framework classes for request-response and notification methods, developed new services Content Manager, and Picon, evolved Encoder, GPRX, Helios, MB, Scavenger, and Transcoder as services, and guided Helper, and Requestor to completion.
- Content manager service for primary-backup workflows: Architected and developed rules-based, dynamic, multi-threaded C++ engine to manage media contents, and metadata updates between two domains.
- Scavenger, Transcoder for proxy media: Proposed new method, teamed up, and successfully wrote two new 24/7 products to replace escalated legacy products that required regular hand holding.
- MediaBase DLL, desktop explorer: Guided to optimize for 200K IDs to meet storage scalability, and achieved interactive UI performance for all conditions regardless of user operation.
- DTA-Handler architecture in ftp-server: Proposed to introduce single handler to help consolidate all formats as one product build, and scalability, and team added one converter DLL per container for import and export.

11/2005 to 08/2009

Software Engineering Manager Company Name ï¼ City , State

- Development and team management, Nexio editing applications:.
- Hired, mentored and built core editing team to size of 8 from Naperville, collaborated with expanded team in Beijing (8 indirect), teamed up to develop server integration modules for video broadcast workflows, and released deliverables for Video Editing Suite 2.5.
- Established development process document for consistent procedures and peer code review guidelines, and team established crash dump analysis procedures to help troubleshoot hard to repeat issues.

08/1997 to 10/2005

Principal Software Engineer Company Name ï¼ City , State

- Harris Corporation acquired Leitch) Architected, designed, and implemented fundamental DLL components for evolution of video editing product, and selected major projects include (C++, Win32, threads, codec SDK, driver SDK, MFC): Interactive playback architecture Video and audio rendering engines Scalable decoder and encoder components Hardware integration modules (critical part of business success in post-production space) Interactive picon and waveform drawing components.

08/1994 to 07/1997

Software Engineer Company Name ï¼ City , State

- DPS acquired Star Media; Leitch acquired DPS in 2000).
- Star Media, technology startup, created video editing software Velocity for post-production space, and developed projects include Project media management tools, Render Bank, and video effects.

Education

M.S : Computer Science Illinois Institute of Technology ï¼ City , State Computer Science

B.E : Electronics and Communication Engineering National Institute of Technology ï¼ City India Electronics and Communication Engineering
Skills

API, ATL, audio, backup, broadcast, C++, CLI, Hardware, concept, content management, Content, client, clients, documentation, dynamic HTML5, editing, XML, FTP, functional, drawing, HTTP, IDs, explorer, JavaScript, json, LAN, MB, access, C#, MFC, Win, Windows, 2000, NAS, OOP, page, Proxy, rendering, SAN, Scrum, servers, specification, team management, threads, troubleshoot, Video, Video Editing, Visual C++