

SOFTWARE ENGINEERING MANAGER

Professional Profile

20+ years of software product development experience in broadcast media, video servers, editing, large scale applications, and 24/7 services, with emphasis on simple solutions, user experience, and teamwork. *10+ years of experience in leading software development teams working across locations (

Qualifications

20+ software engineers), team building, hiring (10+ offers, 40+ interviews), HR personnel procedures, mentoring, performance reviews write up, peer reviews, and project transitions. *Proficient: Visual C++, Windows, STL, OOP, MFC, threads, file maps, memory management, COM, ATL, IPC, FTP, TCP, HTTP, XML, JSON, services, web services, REST API, SOA, media formats and standards, codec SDK and integration, MPEG-DASH, API design and documentation.

Relevant Experience

- REST API and URI specification document for Hercules web service.
- Reuse Innovation" award at Harris Corporation for reuse of the core IP from NLE product suite in Nexio server product suite.
- The editing IP reuse contributed to the Server business unit turnaround.
- Consistent "role model" performance review during principal engineer years.
- Certified ScrumMaster, Scrum Alliance, Dec 2014 - Dec 2016.
- Products: <http://www.imaginecommunications.com/products/playout/video-servers>.

Experience

Software Engineering Manager

September 2009 to Current Company Name i¼ City , State

- Limited: C#, HTML5, CSS, JavaScript.
- BCD of Harris Corporation spinoff as Imagine in 2013) Nexio video servers and applications facilitate collaborative workflow in Nexio LAN with video servers, services and applications running in various nodes.
- Media comes from proprietary SAN or generic storage off NAS.
- Development and team management, Nexio servers' applications, Playout business unit: Relocated from IL to CA, took on larger role, and video server applications product suite as well.
- Led team of 6 from Northridge, team of 8 from Naperville, and team of 8 (indirect report) from Beijing.
- Scrum development methods since 2014, team of 3 to 6 from Burbank; Naperville office closed in 2013.
- Team migrated source revision control to Mercurial / Jenkins.
- Led SOA initiative from concept to completion, 2 web services, 10 JSON services, and decoupled UI layers.
- Released deliverables for Nexio Software Suite 6.0, 7.0, 8.0, Global Proxy Suite 2.5, 3.0, 3.5 Major hands-on projects include: Hercules, web service for web player solution, based off MPEG-DASH Hosts player URI, provides REST API, and delivers fragmented MP4 atoms (H.264 video, AAC audio).
- Provides HTML5 player page, and JavaScript source based off dash JS.
- Supports multiple source types, and "ready to go" and "just in time" sessions.
- C# web service framework API layer bridges with unmanaged C++ engine via managed C++ CLI layer.
- Team helped with providing web service framework, CLI layer, and device testing.
- JSON services on TCP stack using C++ JSON protocol API framework classes; multi-threaded server side socket classes.
- JSON routines, header only parser solution on top of open source "rapid json".
- JSON protosim, common unit test application for all JSON services.
- New services: Content Manager, Helper, Picon, and Requestor.
- Evolved as services: Encoder, GPRX, Helios, MB, Scavenger, and Transcoder.
- Guided services GPRX, Helper and Requestor to completion.
- Content Manager service Rules based engine to manage media contents, and metadata updates between two domains.
- Successfully deployed to manage primary-backup workflows, and storage migration needs.
- NX-theme DLL, skinning SDK (C++, MFC) Applied selective API detour, Window procedure intercept, and application message queue intercept.
- Accomplished consistent look and feel of GUI, and team applied this SDK to multiple GUI products.
- Transcoder, Scavenger, applications for low-res proxy creations (C++, threads, TCP, binary protocol) Needed solution to improve legacy products that required regular hand holding.
- Teamed up, took new approach, and successfully wrote two new products to manage escalation.
- MediaBase DLL, Nexio explorer (C++, MFC) Guided to optimize original implementation for support up to 200K IDs.
- Achieved constant UI performance under few milliseconds regardless of user operation.
- Initiated to introduce "dta-handler" architecture in ftp-server product Approach helped to consolidate all media formats as one product build, and scalability.
- Team added one converter DLL per media container format for import and export.

Software Engineering Manager

November 2005 to August 2009 Company Name i¼ City , State

- Development and team management, Nexio editing applications: Led team of 8 from Naperville, and team of 8 (indirect report) from Beijing.
- Established software development process document including peer code review guidelines.

- Team established crash dump analysis procedures.
- Released deliverables for Video Editing Suite 2.5 Major hands-on projects include server integration modules (critical part of product evolution for video broadcast workflows), and make movie architecture.

Principal Software Engineer

August 1994 to October 2005 Company Name i¼ City , State

- Harris Corporation acquired Leitch) Major projects in video editing suite include (C++, Windows): Interactive playback architecture Media file reader components, scalable decoder architecture.
- Media file writer components, scalable encoder architecture.
- Video rendering engine Audio rendering engine Hardware integration modules, critical part of business success in post-production space.
- Interactive picon component Interactive waveform drawing component 64-bit and Unicode migration of all modules with over 4 million lines of code.

Software Engineer

August 1994 to July 1997 Company Name i¼ City , State

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

Education

M.S : Computer Science Illinois Institute of Technology i¼ City , State GPA: GPA: 3.9 / 4.0 Computer Science GPA: 3.9 / 4.0

B.E : Electronics and Communication Engineering National Institute of Technology i¼ City , India GPA: First Class with Distinction Electronics and Communication Engineering First Class with Distinction

JSON protocol API documents for all 10 JSON services.

Skills

API, Approach, ATL, Audio, backup, bridges, broadcast, C++, CLI, COM, CA, Hardware, concept, Content, CSS, documentation, editing, XML, FTP, drawing, GUI, hiring, HTML5, HTTP, HR, IDs, explorer, JavaScript, json, LAN, team building, MB, memory, mentoring, C#, MFC, office, Windows, Window, 2000, migration, NAS, OOP, page, performance reviews, personnel, Proxy, rendering, SAN, Scrum, servers, software development, team management, threads, Video, Video Editing, Visual C++, workflow, writer