
Summary

I am an experienced engineer, technologist, manager, and entrepreneur with a proven track record of developing and delivering computer, digital video, and software products to market. I am a pioneer in the digital video, interactive television, and multimedia industries, and I possess a wide range of skills, including leadership, recruiting, mentoring, team building, operations management, engineering management, project leadership, program management, software development, and business development. I have successfully assembled and managed large programs, leading development teams that were spread across various companies, disciplines, and geographies, to deliver technology and products to the market.

Areas of Expertise

- Strategic planning
- Startup management
- Senior technical leadership
- Team building, coaching, mentoring
- Computer and cable ab facilities
- Enterprise-scale deployments
- Software architect and lead, code development, C/C++, Python, HTML
- JavaScript, Node.js, Java
- Visual Studio, Unreal, Jira, Confluence, MS Office/Project, Adobe, Google tools proficient
- Video broadcast, streaming, and VR
- Senior Program and Project Management
- SDLC/Agile process, Objectives, requirements driven
- Digital Video, MPEG
- Operations pipeline and process automation

Accomplishments

- Built, motivated, supervised, and mentored large teams developing innovative products and services that have sold over \$100M.
- Established and managed cross-functional, distributed, development groups spanning geographies, companies, and job skills.
- Developed intellectual property portfolio resulting in 16 patent applications.
- Successful business founder and managing director that resulted in two company exits.
- Proven ability in client and vendor engagement and relationship management including C-Level executives.
- Cable industry lead in the development of the OpenCable Application Platform (OCAP) Deployed in over 20 million devices.
- Awarded 2006 ITVT Award for Leadership in Interactive Television (<https://itvt.com/previous-awards/>)
- Proven ability in client and vendor engagement and relationship management including C-Level executives.

Career Experience

Co-Founder/President, Quantum Radius, Denver, Colorado

Jan 2018 - Present

Co-founder of a start-up developing ultra-low-latency video processing cloud technology targeting the VR/AR, eSports, medical, and simulation markets.

- Responsible for engineering direction, business plan development, investor pitches, business partner relationships, intellectual property, operations, and financial management. Led fundraising effort that resulted in a seed funding round of \$1M.
- Architect and engineering lead for the development of a software platform delivering, ultra-low-latency, multi-source, cloud-distributed audio/video platform targeting VR applications. Managed team and led software development of components for MVP written in Java, Python, and C/C++ code on the Unreal Platform targeting Windows and Linux. Developed Linux command line-driven automated testing display device code on Raspberry Pi 3. Responsible for the evaluation, porting, customization, and integration of MPEG, VP9, V1, ProRes, and JPEG-XS encoders. Led evaluation and integration of machine learning techniques targeting load balancing and compression tuning.

Founder/Principal, The Wahlers Group, Denver, CO

Apr 2012 - Present

Provides executive, strategic, technical, and tactical consulting services (using additional sub-contractors when needed).

Core Competency

- Senior operations and technical direction
- Disciplined leadership, building and motivating cross-functional teams
- Program creation, assessment, and improvement
- Engagement and client management, contracts
- Business development and customer relations
- Product Planning and Development
- Government and standards body delegate

Engineering and Technical Management

- Software architecture, design, and team lead
- Building and managing the software development factory including DevOps programs
- Operations, deployment, playbooks, testing, and QA
- Innovation and Intellectual property program establishment and management

...continued...

Technology Skills

- Analyst, Architect, Lead, Expert Witness
- Product, Program, and Project Management
- Process – SDLC, Agile/Scrum, DevOps, product requirements driven, automation
- Software coding – C/C++, Java, Python, HTML, JavaScript, Unreal, Visual Studio, AWS, Azure, web, embedded, and cloud
- Video encoding - MPEG, AVC, HEVC, HLS, DASH, VP9, V1, FFmpeg, JPEG-XS, and ProRes
- VR/AR – Distributed cloud ultra-low-latency video and graphics compression, machine learning
- Networking, Wi-Fi, 5G, 10G, Edge, and Cloud
- Content Management – cloud, NFV, SDN, DRM, OTT, VOD, streaming, video pipeline, encryption, and QOS
- Internet of Things (IoT), smart home and city
- Broadcast, Pay-TV, and Interactive-TV – applications, software tools, platforms, client, and head-end components
- VR/AR – Distributed cloud ultra-low-latency video and graphics processing, Codecs, machine learning, Cloud/Edge

Key Engagements:

Forward Systems, Atlanta, Georgia

Sep 2020 - Present

- Contracted as Vice President, Business Development, specializing in the Cable and Satellite Industries.
- Successfully positioned Forward Systems as a distinguished and approved vendor for Charter.

ActiveVideo Networks, San Jose, California

Dec 2016 - Dec 2017

- Served as Engagement Manager for the Charter Account, driving product planning, fostering business relationships, and overseeing the professional service team. Achieved a 25% year-over-year increase in service revenue.

Charter Communications, Spectrum, Greenwood Village, Colorado

Aug 2015 - Oct 2016

- Acted as Senior Program Manager for Charter's Video and Network Operations division, leading a team of project managers in executing the Network Operations Resiliency Program.
- Collaborated with senior executives to develop program objectives and communication strategies.
- Managed cross-divisional projects to enhance resiliency and service quality, including redundancy implementation, equipment and software upgrades, and platform engineering.
- Oversaw budgeting, vendor management, contract reviews, and procedure development for projects totaling \$78M..

Comcast Corporation, Philadelphia, Pennsylvania

Nov 2014 - Jul 2015

- Provided Senior Program Manager services to Comcast's product division, coordinating and managing efforts related to VOD, OTT, Video over IP, entitlements, and metadata.
- Led project management efforts for the Comcast/Time Warner Cable merger attempt, driving workflow improvements, content onboarding enhancements, and video pipeline optimizations.

ACCESS Company, Oberhausen, Germany

May 2013 - May 2014

- Delivered engagement, strategic, business development, and product planning consulting to establish a US presence.
- Contributed to the requirements and design of OTT, DLNA, and IMF video distribution solutions.

Global Options, New York, New York

Mar 2013 - Dec 2015

- Provided strategic leadership, line management, analysis, and business development services.
- Led a software development team, implementing product development processes based on SDLC, Agile, and DevOps principles.
- Conducted due diligence on acquisition targets and devised market and product strategies for a cloud-based video management product and service.
- Led the development of RapidView, deployed on Amazon AWS, incorporating secure video pipeline technology for trial litigation.

Founder/CEO, EnableTV, Boulder, Colorado

Sep 2008 – Apr 2012

Founded and established EnableTV as a professional services and products company in the interactive TV, IP video, cable, satellite, and consumer electronics industries space. EnableTV was built on the foundation of the core technology, products, and personnel from the buy-back of Vidiom Systems assets from ADB and continued that mission. EnableTV generated \$8M/year in revenue at its peak resulting in a successful exit with a Company Assets Sale in 2012. Responsible for executive and engineering team leadership in all facets of the business.

Founder/CEO/CTO, Vidiom Systems, Boulder, Colorado

Mar 1996 – Sep 2008

Founded Vidiom as a professional services and products company in the digital video, interactive TV, cable, and consumer electronics industries. Vidiom specialized in video processing, embedded software development, client applications, middleware, application server platforms, documentation, and testing. Led the development of dozens of products targeting the digital video and interactive-TV industries. Vidiom grew organically to 150 employees and sub-contractors. Profitable, with year-to-year growth in revenue of 35% topping out at \$18M/Yr. Additionally, held distinguished consulting roles, including Director of OpenCable Software at CableLabs, and served as an Executive Management Consultant to Time Warner Cable. Negotiated a successful company exit through its acquisition by Advanced Digital Broadcast (ADB) in 2006.

Chief Engineer→VP→CTO→President, OptImage Interactive Services, Chicago, Illinois **Apr 1987 – Mar 1996**

OptImage was a NV Philips, Microware, RR Donnelley, and Sun Microsystems Joint Venture responsible for the infrastructure development for the CD-ROM, CD-I, MPEG, Video-CD, and DVD multimedia platform standards at the dawn of the interactive TV industry.

Principal Nuclear Engineer, Commonwealth Edison, Chicago, Illinois **Jan 1982 – Apr 1987**

Developed leading-edge software/hardware solutions for embedded process computer systems in nuclear facilities.
Provided electrical engineering services in the startup of two nuclear plants and offsite emergency response facilities.

Education

Bachelor of Science, Nuclear Engineering

University of Wisconsin, Madison

Postgraduate work in fusion energy and microcomputer process control

Graduate assistant – Linear plasma experimental lab