
OBJECTIVE

Senior-level systems engineer/architect, senior project engineer, product manager, engineering manager or new business developer for consumer/business products or commercial construction projects

SUMMARY

- High-energy, quick thinker – has the breadth of experience to see the big picture yet has the skill sets to work at an in-depth level
- Seventeen years experience working on systems engineering and systems architecture
- Experience as product manager and new business development manager
- Experience working on projects in the United States, Europe, Asia and the Middle East
- Experience as designer for consumer and business electronic products and systems
- Construction management for commercial building-wide and campus-wide projects
- Comfortable collaborating as part of a team or directing the work of others
- System experience includes:
 - audio-video-control systems for themed attractions
 - telecommunications
 - streaming multimedia
 - robotic systems
 - internet data centers
 - broadcast audio and video
 - wireless communications
 - interactive multimedia
 - consumer electronics
 - custom software for user interfaces
 - local and wide area networks
 - satellite and cable television delivery
 - virtual reality and high-end graphics
 - high-volume manufacturing

EXPERIENCE

Carousel Interactive Technologies, San Jose, CA

Owner and Principal Consultant, 1995-present

- Provide consulting services for systems design of audio, video, telephone, data network and satellite television systems for commercial buildings
- Provide contract product management and project management for complex electronic systems and products
- Write system-level specifications and manage tender bidding process
- Design internet data centers and web hosting / streaming facilities
- Serve as construction manager for systems integration companies on large building projects
- Serve as client representative for building technology specification and architectural liaison
- Provide design services for consumer and business electronic products
- Provide technical design and management expertise to support themed entertainment systems and public attractions
- Manage custom software development for graphical user interfaces and web-based control systems

Key Projects:

Stanford University Surgical Simulation Lab, Stanford, California (subcontractor to David Carroll Associates)

- Managed the process to identify the user requirements from the doctors and surgeons for the overall facility
- Modified the system design to support surgical mannequins, stereoscopic graphical imaging, multiple channel video recording, and haptic surgery trainers
- Worked with Stryker Endoscopy to design a system interface with their Operating Room equipment and the custom audio-video equipment in the Simulation Lab

Stanford University Radiology Interactive Classroom, Stanford, California (subcontractor to David Carroll Associates)

- Worked as Senior Project Engineer on the design and installation of interactive classroom for the Radiology Department containing three hi-resolution projectors (instructor screens) and five plasma displays (student workgroups)
- Managed design of Graphical User Interface requirements and software programming involving custom software and customized hardware
- Provided user training to faculty and staff

Bur Juman Shopping Center Expansion, Dubai, United Arab Emirates (subconsultant to Shen Milsom & Wilke)

- o Managed low-voltage design team for audio, video, telephone, data network, satellite television systems for two million square feet mixed use retail, office, hotel and apartment project
- o Designed key components of all systems and coauthored system specifications
- o Interviewed integrators in Dubai and helped select winning tender respondent
- o Reviewed shop drawings and construction progress in Dubai during several trips and helped train operations team

Singapore Supreme Court New Building, Singapore (subconsultant to Shen Milsom & Wilke)

- o Designed streaming media system to record court trials from multiple cameras and microphones
- o Wrote specifications for software system to allow users to review the trial footage and provide text transcription services and link the text to the audio-video feeds
- o Designed infrastructure required to install equipment in the new building

Private residence for Billionaire, Northern California (subconsultant to MCSi)

- o Managed the construction progress in the field and commissioned the satellite system
- o Designed hybrid fiber-coax satellite master antenna television system for small campus of buildings
- o Assisted with the design of the distributed audio and video systems throughout the complex

Intel Streaming Media Data Center, Portland Oregon & Reading, UK (subconsultant to MCSi)

- o Designed the systems and infrastructure to support web-based audio-video encoders in a broadcast studio and web hosting facility
- o Performed lab evaluation of several brands of hardware encoders that utilize digital video (SDI) and digital audio (AES) interfaces with Windows Media and Real Networks software codecs
- o Coordinated with Microsoft Corporation to help locate several bugs found in Windows Media Encoder

Pogo.com (Electronic Arts) Online Game Data Center, San Francisco, California (direct consultant)

- o Designed the local and wide area network infrastructure and the facilities equipment for two data centers and the corporate office building
- o Managed the construction in the field and served as the client technology liaison to the general contractor and the building architect
- o Managed the bid process for the structured wiring contractor

Sony Metreon Mall and Entertainment Center, San Francisco, California (direct employee, Sony Development)

- o Served as Senior Project Engineer responsible for all the attractions
- o Managed the design, construction and installation of the audio, video, show control and ride control systems
- o Designed the high-level and low-level technical systems based on artistic meetings with the show creative team
- o Wrote scope documents and awarded contracts to various systems' integrators involved in the project

Disneyland Tomorrowland Renovation, Anaheim, California (subconsultant to Richanbach and Associates)

- o Served as technology project manager for large interactive pavilion, "Innoventions"
- o Worked as systems engineer with Walt Disney Imagineering for show control, computer systems, media delivery systems, telecommunications, data networking, and electric power
- o Divided creative design into biddable packages including scope, schedule and budget.
- o Selected vendors and awarded contracts for audio, video, lighting, show control, computer systems, media and graphics

Total Entertainment Network Online Game Data Center, San Francisco, California (direct consultant)

- o Managed the system design and installation of a large computer data center that supports a multi-player game service over the Internet
- o Served as overall hardware system architect and facilities designer
- o Coordinated the installation of two OC-3 fiber optic connections to the Internet
- o Configured Sun Microsystems servers and Cisco routers.

Shark Rack Custom Rack Mount Solutions, Sunnyvale, California (cofounder and inventor)

- o Raised money to support new product line idea
- o Designed eight products that provide supplemental cooling and rack mounting for Sun Microsystems computer equipment
- o Patented aesthetic design for large server rack mount system, patent # D428,892
- o Managed construction of prototypes and initial production units throughout metal fabrication, finishing, wiring and packaging

Netscape, Inc. Web Site Testing and Validation, Mountain View, California (direct contract)

- o Co-founded company "WebChecked.com" to provide web site validation and testing
- o Tested Java, JavaScript and basic HTML software against various Netscape browser versions and Windows, Macintosh, Sun Solaris and Silicon Graphics Irix operating systems
- o Analyzed TCP and UDP connection performance through four different firewall products

Custom Web Page Design and Hosting (various clients)

- o Designed, created, and managed Internet web sites using HTML, Java, JavaScript, Shockwave, C and integration with various database systems
- o Provided hosting services on Silicon Graphics and Sun Microsystems servers

Silicon Graphics, Inc., Silicon Studio, Mountain View, CA

Manager, Strategy and Business Development, Location Based Entertainment, 11/94 to 3/95

- Developed new business model for Location Based Entertainment systems using interchangeable software on standard systems with common open interfaces
- Planned and coordinated industry-wide summit on how to make the LBE market succeed
- Worked with facility operators, content creators and software tool developers to understand their unique requirements for the SGI-based real-time graphics entertainment industry

Iwerks Entertainment, Burbank, CA

Product Manager for Interactive Attractions and Senior Systems Engineer, 7/93 to 11/94

- Managed design, development and product roll-out of Virtual Adventures: the world's first high-throughput virtual reality attraction
- Helped position the company for a successful Initial Public Offering (IPO) On October 19, 1993
- Wrote system requirements, co-developed system architecture, analyzed market demand, trained sales staff and managed system construction and installation into initial customer facility
- Developed business plan for new interactive product line focused at high-tech family entertainment
- Served as company's interactive expert and spokesperson at international conferences and seminars

AT&T Bell Laboratories, Indianapolis, IN

Member of Technical Staff - Team Leader, 1/92 to 6/93

- Managed small team of engineers and business development personnel
- Designed prototypes of new consumer products and services that utilize voice and speaker recognition, video telephony, touch-screen appliances, interactive television and wireless personal communications
- Assisted with design for nationwide video telephone service utilizing CATV system and set top boxes

AT&T Bell Laboratories, Naperville, IL

Member of Technical Staff, 5/85 to 12/91

- Led 50-person team which defined the architecture and design parameters of a new line unit for analog and digital (ISDN) lines for united states and international markets
- Developed architecture for new system to use wireless in-building "private cell sites" for voice communications in a typical office building
- Managed architecture team that provided a high-speed optical interface (SONET) to the 5ESS-2000 telephone switching system
- Served as member of core architecture team for the 5ESS-2000 telephone switching system
- Designed new line interface hardware to solve an audible click problem with Taiwanese coin phones and demonstrated the solution for the customer in Taiwan
- Received "One Year On Campus" fellowship to pay for fulltime master's degree in electrical engineering

General Dynamics, Fort Worth, TX

Electrical Engineering Intern, Summer 1983

- Created and taught a course covering use of a new Cincinnati Milacron 776 industrial robot
- Designed robot end-effector for use in the course
- Wrote the electrical section in an Air Force manual on a robotic positioning device

EDUCATION

MSEE, Oklahoma State University, 8/86, GPA = 3.8/4.0

Thesis Project #1: Creation of new course, "Practical Engineering Design" (which is now a required class)

Thesis Project #2: Design of four-legged walking and talking robot named Pegasus

BSEE, Oklahoma State University, 12/84, GPA = 3.7/4.0

Sample Projects – Michael Haimson



Disneyland Tomorrowland Innoventions Attraction



Sony Metreon Wild Things (left) and Air Tight Garage (right) Attractions



Iwerks Virtual Adventures 3D Interactive Attraction



Bur Juman Shopping Mall, Office Tower, and Apartments