
MOBILE MEDIA AND GAMES • SYSTEMS ENGINEERING

Results driven problem solver and development professional.

Passion for delivering innovative media, animation and game products and technologies.

- Leading creative and engineering projects
- Embedded systems design
- Scalable high-availability IT architecture
- Project management
- 2-D and 3-D animation software
- Interactive game development
- Mobile communications technologies
- TV and media technologies

Technical skills include: C, C++, Java, SQL, assembler, device drivers, multimedia scripting, UNIX, Linux, Mac OS, multivariate statistical analysis, mathematical modeling.

PROFESSIONAL EXPERIENCE

DVI SCIENCE LTD – New York, NY

2002 to Present

Principal Consultant

Interactive media product strategy and development. Projects include:

Actor Machines – New York, NY, 2008 to Present

- Creating automation solution for deploying game software.

Digital Virtual Imaging, Ltd – New York, NY, 2002 to Present

- Developing mobile games in C for the Apple iPhone and the Qualcomm BREW platform.
- Developed interactive artist tools in C and assembler for UNIX based systems.

Cablevision Systems – Voice Product Management, Bethpage, NY, 2005 to Present

- Architected and led on-time delivery of number portability solution, doubling the addressable market and sales for competitive voice services.
- Led analysis and remediation of location database quality to meet public safety.

Case Western Reserve University – Enterprise IT Architecture, Cleveland, OH, 2003 to 2005

- Created strategy and business plans for campus-wide mobile communications platform. Led program team of IT departments, university stakeholders, regional partners, and technology partners in defining, and developing business case, technical platform and operational processes.

VisualEyes – New York, NY, 2002

- Created interactive design solutions for textile and interior design industries.

EVEREST BROADBAND NETWORKS – Fort Lee, NJ

2000 to 2002

Senior Director – Voice and Video Products

- **Business Television:** Designed, developed and managed business TV services. Led business case development, engineering and quality assurance. Managed development partnerships with cable news providers. Developed IP video services portal, advertising insertion, secure access, and video content caching.
- **Residential Broadband:** Integrated and managed satellite TV and CableLabs defined systems. Subject matter expert for federal cable television regulations.
- **Voice services:** Designed, built, and managed one of the first commercially successful carrier-grade nationwide VoIP services delivered on a fully managed IP network. Led cross-functional product team; led engineering and application development; developed partner, and enterprise customer relations.

BELL ATLANTIC/NYNEX SCIENCE AND TECHNOLOGY – White Plains, NY

1987 to 2000

Technical Director, Broadband Video Systems Engineering

- **Software Development:** Led design, development, and deployment of Dow Jones Investor Network Media Server platform for broadcast and on-demand video news. Architected and led development of video service delivery systems and components, including: Broadcast Data Carousel, Video Services Control, and Video Network Set-top Box Middleware. Contributed to Server/Set-top Box API architecture adopted by ISO/IEC MPEG DSM-CC Standard Committee. Developed and implemented ISO-9000 certified quality software development processes.
- **Systems Engineering:** Developed end-to-end architectures for video service delivery platforms operating over Wireless Broadband, Switched Digital Video, Hybrid Fiber Coax, and Fiber-to-the-Curb. Led multi-vendor interoperability working groups to standardize digital video server / set-top protocols and APIs. Architected content authoring, content distribution, and advertising insertion for digital video applications.
- **Technology Strategy:** Led video strategy component of \$10B+ broadband infrastructure plans, including five-year forecasts of digital video technology costs. Technical lead for NYNEX Video Dial Tone product.

Technical lead for software licensing, technology valuation, joint venture plans, evaluating start-up investments, and spin-off initiatives. Managed RFP processes, partner selection, and make vs. buy decisions for video systems and technologies.

- **Applied Research:** Managed broadband services and applications prototyping laboratory. Served as NYNEX lead for research partnerships with Apple Computer and MIT to develop collaborative media creation and distribution applications for the advertising industry. Led development and field trial of NYNEX Shuttle collaborative video platform for media creation. Demonstrated prototypes at trade and academic forums. Organized staff development seminars.

LANDMARK ENTERTAINMENT/ARCCA ANIMATION – Hollywood, CA, Toronto, ON

1986 to 1987

Director, Research and Development

Designed and built the 3D animation studio that created Captain Power, which was the first interactive TV series to receive FCC permission to include broadcast signals controlling game devices. Developed scalable systems for motion modeling, rendering, production workflow, content management, and interactive composition of 3D-character animation with live action video.

MAGI SYNTHAVISION, Inc – Santa Barbara, CA, Elmsford, NY

1982 to 1986

Technical Director, and Vice President R&D

Led advanced development for MAGI SynthaVision which pioneered 3D animation technology to create the groundbreaking classic Disney film Tron. Developed ray-tracing software, interactive design systems, scanned and procedural textures, as well as illumination and reflectance maps. Also served as lead technical director for award-winning TV commercials, interactive games, and film projects under the direction of Academy Award winning directors John Lasseter and Chris Wedge.

EDUCATION

Degrees	MA in Mathematics – City University of New York BA in Mathematics – City College of New York
Honors	Ward Medal for Logic – City College of New York
Grad Courses	Columbia University School of Engineering – Mobile Applications PhD seminar NYU Stern School of Business –Graduate Business Administration NYU Courant Institute –Computer Science New York Institute of Technology –Computer Science

PUBLICATIONS

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- Editor – Mobile TV chapters in *Television Goes Digital*, Springer Verlag, publication due 2009
 - Article – *Customer Terminal Systems for Video Dial Tone Networks*, IEEE Network, 1995
 - Paper – *News on-Demand for Multimedia Networks*, ACM Multimedia 1993
 - Paper – *Global Illumination Models*, Computer Animation Tutorial, ACM SIGGRAPH 1984
 - Article – *History of Image Based Rendering Technologies*, 1999
<http://www.debevec.org/ReflectionMapping/miller.html>

INDUSTRY PARTICIPATION

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- Chair – MONDO Digital Video interoperability Working Group
 - Panel Chair – Video Dial Tone Networks, ACM Multimedia
 - Editorial Board – Multimedia Tools and Applications Journal
 - Reviewer – ACM SIGGRAPH National Conference Papers
 - Contributor – DAVIC Set-Top Architecture Working Group
 - Contributor – ISO/IEC JTC1/SC29/WG11 MPEG DSM-CC Working Group
 - Panel member – Computer Animation Technology, SMPTE, NCGA
 - Panel Member – Columbia University Institute for Tele-Information conference on WiMax.
 - Panel member – Future of Digital Television Conference, Columbia University
 - Member – International Game Developers Association, ACM SIGGRAPH, IEEE, International Association of Software Architects, NY Semantic Web Group