

J. Michael Birch, MSEE
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PROFESSIONAL SUMMARY

Consultant / Systems Engineer / Director: 25+ years experience in software engineering, games, digital video, e-learning and managing all aspects of the software development cycle. Co-founder of GTE Interactive Media (1990), one of the first all-digital multimedia studios.

EDUCATION

M.S. Electrical Engineering, University of Pittsburgh, PA with a GPA of 4.0/4.0.

B.Sc (with honours) Electrical Engineering, University of Manchester, UK.

UCSD Extension: Java, Object Oriented Analysis, Wireless Communications, etc.

TECHNICAL SKILLS

- **System Design:** Object-Oriented Analysis & Design. User Interface. Prototyping.
- **Requirements Analysis:** Rational Process: Requisite Pro, Patent and IP licensing
- **Multimedia:** e-Learning, CBT, interactive video, streaming, PC & console games.
- **Programming:** ActionScript 2.0/3.0, PHP 5, MySQL, some Java and C/C++.
- **Internet:** XHTML, XML, Javascript, Dreamweaver CS3, Flash CS3, Joomla etc.
- **Applications:** MS Project, Word, Excel, Powerpoint; Filemaker, Photoshop, Director etc.
- **Hardware:** PC, Mac, DVD, set-top boxes, game consoles etc.
- **Other:** 15+ years programming real-time OS, client/server/database, data communications.

MANAGEMENT SKILLS

- Managing the software development life cycle from concept and design, to test and support.
- Researching and applying technology to solve business problems and create new products.
- Providing research and technical support for senior executives, legal, sales and marketing.
- Resolving cross-discipline issues and explaining new technology to non-technical staff.
- Understanding and explaining financial spreadsheets, IP rights and legal requirements.
- Managing multiple projects, outsourced development teams and multimillion-dollar budgets.

PROFESSIONAL EXPERIENCE

1/01-now Consultant / Software Engineer - Computerade - Cardiff, CA

Served as **Expert Witness** for trial re software development, consulting and games (2009).
Consultant to local e-learning companies re development in ActionScript 2.0/3.0 and XHTML.
Designed and developed five software products for special education for Mayer Johnson, LLC.
Developed Flash and digital video training prototypes. Created and enhanced several websites.

8/05-6/06 Associate Faculty Mira Costa College - Oceanside, CA

Instructor for IMT-190 Multimedia Programming, intermediate ActionScript 2.0 class and lab.
Developed course and created all materials including a comprehensive website (part-time)..

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2/04-11/06 Systems Engineer Accord Solutions, Inc - San Diego, CA

Business development, writing SBIR proposals and project management for DoD contracts. Developed visualization tools in Flash ActionScript 2, PHP and MySQL (part-time).

2/02-7/03 Director Content Systems Teramedia Comm. Inc. - San Diego, CA

Developed content and MPEG-2 metadata enhancements for a targeted TV advertising system. Created and presented Flash MX and MPEG-2 demos for Cable TV executives. (part-time).

1997-11/00 Director, R&D / Project Director CompassLearning - San Diego, CA

Hired a team of 12 programmers and artists to redevelop 99 interactive multimedia lessons. Resolved technical and contract issues. Managed successful development by overseas contractor. Programmed prototypes and prepared the standards and development processes to reduce costs. Evaluated strategies and technologies of potential "dot.com" acquisitions and partnerships.

1990-97 GTE Interactive Media a.k.a. GTE-IM, GTE-Entertainment

1996-97 Director of Product Development GTE-IM, Carlsbad, CA

Contracted with developers in Norway, UK, and US and directed development of advanced 3D graphics games for Windows and Sony Playstation, from concept to production. Managed development, quality, budget and schedule for 2-3 concurrent \$1-2M projects.

1994-95 Director of Business Development GTE-IM, Carlsbad, CA

Reviewed 100's of game specifications. Met with developers in the US, Canada and Europe to determine their ability to use leading-edge technology and create great games. Initiated negotiations for IP rights, and worked closely with GTE legal counsel to prepare development contracts. Successfully negotiated an agreement with the Rolling Stones to publish the best- selling Voodoo Lounge interactive CD-ROM.

1990-93 Director of Technology GTE-IM, Carlsbad, CA

Provided the technical vision for startup of one of the first all-digital multimedia companies. Hired the core software team; supervised up to 12 software engineers. Created novel Hologram arcade game, and sold manufacturing rights to Sega. Directed interactive multimedia and MPEG-2 projects for CD-ROM, CD-I, and cable TV set-top boxes (with the Discovery Channel).

MISCELLANEOUS

- Speaker and panel member at various industry shows, and local professional groups.
- Active participant in the professional DVD/digital video Internet forum/list.
- Published papers on process control, interactive TV/video, electronic distribution, etc
- Developed web-site for Mayer-Johnson, Inc. www.mayer-johnson.com 1997-2002.
- Participant in Qualcomm BREW 2001-03 wireless applications developer conferences.
- US Citizen. Senior member of IEEE, MIT Forum, CommNexus (SD Telecom), SDSIC.