

## SUMMARY

- 20+ years of design experience in multiple disciplines including: information architecture, interactive design, user interface design, mechanical engineering, product design, web development, and architecture
- 15+ years of project management experience leading multidisciplinary and multicultural teams in both international and domestic settings
- Proven track record in guiding very diverse & complex projects through all stages of development from conception, research, strategic planning, and design, through execution, testing, marketing and quality assurance

## EXPERIENCE

**Technical Development Manager** for *Death and the Powers* – MIT Media Lab (Cambridge, MA) (4/2008 – present)  
*Death and the Powers* is an innovative new opera developed through the MIT Media Lab featuring innovative robotic set pieces. The technology developed for the operas include - the *Chandelier* (an articulated, 14 ft tall hyperinstrument), the *Walls* (3 autonomously mobile 15' tall, 3000 lb periktos with Versatube display surfaces) and the *Operabots* (a Greek chorus of highly expressive semi-autonomous robots).

- Assembled and led a team of MIT graduate students, undergraduates and industry professionals in designing, constructing and testing the robotic set pieces in close collaboration with the production designer Alex McDowell.
- Oversaw all technical decisions.
- Controlled the entire development schedule and budget.
- Contracted and managed outside vendors and consultants.
- Trained and managed operators to run the equipment during the live performances.
- *Death and the Powers* debuted in Monaco in the Fall of 2010. We had a technologically flawless run and ended significantly under the projected budget. The opera is slated for runs in Boston and Chicago in the Spring of 2011.

**Technology Lead** - Partners In Health (Lesotho, Africa – Boston, MA) (9/2006 – 2/2008)  
*Partners in Health (PIH)* is a non-profit organization with an annual budget of about US\$40M dedicated to bringing preferential healthcare to the poorest communities around the world.

- Worked as the technical lead in a 3 person startup team in Lesotho to build, equip, and staff new HIV/AIDS clinics
- Adapted an open source web based electronic medical records (EMR) system for the multiple health programs - debugged/redesigned the EMR for usability, set up IT systems, hired, trained and managed data collection staff
- Performed architectural design, drafted detailed blueprints and specifications, contracted and supervised the construction of environmentally appropriate buildings focused on good patient flow and infection control at multiple remote mountain sites simultaneously
- Specified, procured and supervised installation of solar power systems and VSAT communications systems
- Developed relationships and worked in close partnership with Government Ministries, NGOs and local vendors
- In just over one year, we built 4 clinics in remote mountainous sites which serve a catchment area of approximately 80,000 people and currently have 50+ staff, a total of >1000 patients started on anti-retroviral treatment and >2000 patients entered into our EMR

**Interactive Multimedia Designer/Producer** - New Media Productions (Cambridge, MA) (11/2001 - 8/2006)  
*New Media Productions* is a 15 person multimedia product development company whose sole client is Learning Technologies Ltd. – The largest Disney educational licensee in the world with total annual revenue of about US\$200M. Its main product is *Disney's World of English* – an at-home English learning product for children (4-10 yrs old) in the Asian market.

- Led a team of linguists and writers through the research and development of interactive material that would work on multiple (non-computer) platforms and complement the existing Disney's World of English product line
- Designed the architecture and all user interfaces of all interactive games and activities
- Art direction on the project - sketched initial layouts, directed illustrators & graphic designers, worked with Disney for all art approvals, worked with printers based in Asia
- Worked with a programmer to develop new levels of interactivity for the proprietary “Playmate” platform and to develop its associated prototype database management software
- Managed a team of programmers new to the platforms in implementing the imbedded games and exercises
- Supervised all audio recording and editing, worked with Disney Character voices for all approvals
- Led a team in extensive testing & quality control efforts in conjunction with Disney and Leapfrog
- The new products resulted in over US\$12M in revenue in the first year of its release

**Multimedia Project Director** - Learning Technologies (Taiwan) Ltd. (*Taipei, Taiwan*) (10/1997 - 11/2001)

**Web Development**

- Created content for, designed, coded, and marketed a first generation HTML site to sell and support Disney's World of English (DWE)
- Developed immediate profit through multiple revenue streams – direct sales, advertising and 1000's of high quality sales lead generated in the first few months alone at approximately 20% of the cost of conventional methods
- Managed a team of writers, designers and programmers on content and design of a 2nd generation (PHP-based) DWE site, designed structure and layout of the Disney's Magic English (DME) site, the Zippy! English for Kids site and collaborated on redesigning the 2nd generation Actual Living English site
- Directed an international team (4 different countries) in collaborative monthly creation of educational Flash games
- Adapted and maintained the DWE site for the Hong Kong market, coordinated internet content sharing with sister organization in Japan

**Product Development**

- Planned out the creation of "Zippy! English for Kids" - an extensive, English learning product that combines multimedia products with integrated automated services delivered on a subscription basis
- Information architecture, graphic design and development management of a package of 6 CDROM games (in 2 years for under US\$300k)
- Art direction for the entire Zippy project - determined overall look and feel, supervised packaging design
- Developed activity books and collaborated on original video scripts
- Co-wrote 6 of 11 original children's songs and managed vocal recordings
- Drew storyboards for, produced, directed and supervised editing of 11 educational music videos (in less than 2 weeks for under US\$15k)
- Designed the template for the automated phone service lessons and the template for the monthly mailing

**Miscellaneous**

- Planned monthly live events and activities for Actual Living English (ALE) - a 30,000+ member adult English club
- Worked in a team to script, direct, shoot, edit and/or produce several in-house video productions including "Now You're Talking!" 1999 ALE Yearbook, JTS Sales Training Video, etc.

**Freelance Design/Research/Misc.** (*Taipei, Taiwan*) (9/1994 -10/1997)

- **Design projects** – web pages, banner ads, CD booklets and artist promotional material, logos & corporate identity, product packaging, magazine ads, posters, DMs, catalogs, surveys, invitations, etc. for various clients
- **Writing/research projects** – "Investing, Licensing & Trading Conditions Abroad - The Taiwan Country Report" (1996 & 1997) for the Economist Intelligence Unit Ltd., "Market Research on Service in the Computer Industry in Taiwan" for International Data Corporation, creative material for television program: "Go West" (Channel 'V') through Artone Productions Ltd., treatment and script consultation for upcoming feature film: "Model Minority"
- **Music projects** – Bass guitar, songwriting and backing vocals in multiple bands, independently recorded, released and marketed 2 CDs of original music which sold several thousand copies in Taiwan and Hong Kong

**Design Engineer** - Foster-Miller Inc. (*Waltham, MA USA*) (9/1989 -9/1994)

*Foster Miller is an MIT spinoff company specializing in innovative, engineering projects. Projects I worked on include - Nuclear power plant inspection robot (US DOE), Magnetically Levitated Train Preliminary Study (US DOT), Miniature Internal Pipeline Inspection Vehicle (Gas Research Institute), Electric Vehicle Magnetic Signal Cancellation (US DOT)*

- Wrote technical and cost proposals to secure research funding
- Performed conceptual and detailed electro-mechanical design - US Patent # 5172639: "Cornering Pipe Traveler", patent pending(?): "Active Magnetic Signature Cancellation System"
- Managed project scheduling, manpower allocation and budget (the largest personally responsible for US\$500k)
- Supervised drafting, manufacturing and assembly personnel
- Oversaw quality control, testing and demonstration
- Wrote periodical and final reports, made presentations

## EDUCATION

**B.S. Mechanical Engineering** with an elective concentration in Fine Arts (1985-89)  
Carnegie Mellon University (*Pittsburgh, PA USA*)