

## SUMMARY

- **20+ years of technical project management experience** leading multidisciplinary and multicultural teams in unusual projects in both international and domestic settings
- **Creative and flexible designer** with expertise in a broad range of fields including robotics and UI design. Capable of and willing to step in and fill whatever role is necessary to complete a project.
- **Proven track record** in guiding very complex, high pressure projects through all stages of development from conception, research, strategic planning, and design, through execution, testing, marketing and quality assurance

## EXPERIENCE

MIT MOBILE EXPERIENCE LAB, Cambridge, MA (6/2011 – present)

### Project Manager / Researcher (*The Sustainable Connected Home Project*)

*The Sustainable Connected Home is a multi-million dollar research collaboration between MIT-MEL and Fondazione Bruno Kessler. The research integrates renewable energy systems, sustainable architecture, social sustainability, and connected information systems and culminates with the construction of a full-scale prototype home in Trento, Italy.*

- Inherited a project facing significant delays resulting in what my predecessor explained was “the goals for a 3 year project basically being compressed into 6 months”
- Oversaw all technical decisions trimming the project scope to a manageable level
- Negotiated a 2 month extension and brought the budget under control
- Managed a diverse group of MIT graduate students, consultants and Italian vendors/partners in both hardware and software development
- Personally designed printed circuit boards for dynamic window controls and a tablet-based user interface for all house controls

**RESULTS:** *The Sustainable Connected Home Prototype is projected to be completed on schedule and on budget in early 2012.*

MIT MEDIA LAB, Cambridge, MA (4/2008 – present)

### Technical Development Manager (*Death and the Powers*)

*Death and the Powers is an innovative new opera developed by the MIT Media Lab and the American Repertory Theater. It features live actors interacting with innovative robotic set pieces.*

- Facilitated challenging communication between MIT engineers, non-technical theater professionals, accountants, lawyers and Monaco-based funders
- Balanced the budget, technical risk and artistic considerations to reach a compromise on the overall scope and direction of the design of the robotic set pieces
- Contracted and managed outside vendors and consultants to design and construct the larger structural set pieces
- Personally performed mechanical design of human-sized robots in Solidworks, circuit board design in PCB Artist
- Assembled and managed a team of 10+ graduate and undergraduate students to construct human-sized robots in-house, build control systems and train as operators to run the equipment during the live performances

**RESULTS:** *Death and the Powers debuted in Monaco in the fall of 2010. We had a technologically flawless run and finished under the projected budget. We debuted in the US with widely critically acclaimed runs in Boston and Chicago in the spring of 2011. Arrangements are underway for shows in San Francisco (2012), Dallas, Philadelphia and NY (2013).*

PARTNERS IN HEALTH, Lesotho, Africa – Boston, MA (9/2006 – 2/2008)

### Technology Lead (*PIH Lesotho*)

*Partners in Health (PIH) is a Harvard affiliated, non-profit organization with an annual budget of about US\$40M dedicated to bringing preferential healthcare to the poorest communities around the world. The goal of the Lesotho project is to bring primary healthcare – with a specific target of HIV and TB patients – to the remote mountain villages of Lesotho*

- Originally hired to implement an Electronic Medical Records system, after assessing the condition of the existing remote mountain clinics, I switched focus to rapid infrastructure building
- Developed relationships and worked in close partnership with Government Ministries, NGOs and local vendors
- Drafted rough architectural blueprints and specifications, contracted and supervised the construction of environmentally appropriate buildings focused on good patient flow and infection control at multiple sites simultaneously
- Specified, procured and supervised installation of solar power systems and VSAT communications systems
- Hired doctors and local staff, adapted PIH protocols to Lesotho conditions and provided training.
- 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

**RESULTS:** *In just over one year, we built 4 clinics in remote mountainous sites which serve a catchment area of approximately 80,000 people. When we handed off the system to our local partners we had 50+ staff, >1000 patients started on anti-retroviral treatment and >2000 patients entered into our EMR system*

**NEW MEDIA PRODUCTIONS, Cambridge, MA**

(11/2001 - 8/2006)

**Producer/Designer**

*New Media Productions is a 15 person multimedia product development company whose sole client is Learning Technologies Ltd (see below). Its main product is Disney's World of English (DWE) – an at-home English learning product for children (4-10 yrs old) in the Asian market*

- Led a team of Harvard linguists and writers through the research and development of interactive technologies based on multiple (non-computer) platforms to complement the existing DWE line of products
- Designed user interactions, sketched initial layouts, directed illustrators & graphic designers, coordinated with Disney for all art approvals, and oversaw Asia-based printing processes
- Managed a team of programmers to expand the capability of existing platforms and to implement the imbedded games and exercises
- Supervised all audio recording and editing, worked with Disney Character Voices for all approvals
- Led QC team in extensive testing and quality control efforts in conjunction with Disney and Leapfrog

**RESULTS:** *The new products exceeded expectations by resulting in over US\$12M in new revenue in the first year of its release*

**LEARNING TECHNOLOGIES (Taiwan) Ltd. (LTL), Taipei, Taiwan**

(10/1997 - 11/2001)

**Multimedia Project Director**

*LTL is based in Asia and is the largest Disney educational licensee in the world with total annual revenue of about US\$200M.*

- Created and marketed a website to sell and support *Disney's World of English*.
- Rapidly expanded the site in both Taiwan and HK with English learning content, materials for parents and Flash games

**RESULTS:** *Developed immediate profit through multiple revenue streams – direct sales, advertising and thousands of high quality sales leads per month generated at approximately 20% of the cost of conventional methods*

- Planned out and executed the creation of *Zippy! English for Kids* - an extensive, new English learning product that combines multimedia products with integrated automated services delivered on a subscription basis – the first of its kind in developed completely in Taiwan

**RESULTS:** *The product was released in 2 years - approximately half the time required for previous comparable products and at a fraction of the cost. After seeing initial reactions to the product, LTL formed an entirely new company division using Zippy as the flagship product*

**FREELANCE, Taipei, Taiwan**

(9/1994 - 10/1997)

**Designer/Researcher/Writer**

*Graphic design projects*

- Designed web pages, banner ads, CD booklets and artist promotional material, logos & corporate identity, product packaging, magazine ads, posters, 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.

**FOSTER-MILLER INC., Waltham, MA**

(9/1989 - 9/1994)

**Design Engineer**

*Foster Miller is an MIT spinoff company specializing in innovative, specialized, engineering projects. Projects included:*

- Miniature Internal Pipeline Inspection Vehicle (Gas Research Institute)
- Nuclear power plant inspection robot (US DOE)
- Magnetically Levitated Train Preliminary Study (US DOT)
- Electric Vehicle Magnetic Signal Cancellation (US DOT)

**RESULTS:** *US Patent # 5172639: "Cornering Pipe Traveler". Personally responsible for writing SBIR proposals bringing in over US\$500k of new business.*

**EDUCATION**

**CARNEGIE MELLON UNIVERSITY, Pittsburgh, PA**

(9/1985 - 5/1989)

**B.S. Mechanical Engineering** with an elective concentration in Fine Arts