Erin Marie Panttaja

http://web.mit.edu/~erinp

Professional Profile

I am an interaction designer and creative team lead. I like making complex functionality easy to use. I have experience designing, managing, and building projects ranging from video games that train communication and collaboration skills, to voice-controlled personal assistants, to interactive theater pieces. I have worked with users, artists, and engineers to create innovative and compelling experiences for a wide variety of users.

General Skills

Skills: Game Design, User Experience Design, Voice User Interface Design, Project Management, Storytelling, Playwriting, Puppetmastering, Grant Writing, Patent Writing, Editing

Programming Languages: Java, LaTeX, Perl, Eclipse, Python, Django, SQL

Languages: Spanish (conversational), Arabic (basic)

Experience

BBN Technologies — Cambridge, MA
Scientist — July 2006 – July 2008

- Designed a plot structure and custom instrumented web portal for a one-month Alternate Reality Game-based training for over 100 Joint Forces staff members and students, with a team of seven. Led the four-person technical team to build software in Django, Python, and mySQL.

- Designed and implemented stories, scenarios, and puzzles for a collection of collaborative and single-player puzzle games based in 3D RPG Neverwinter Nights.

- Transcribed and analyzed conversations to generate speech models of trainee communication in military convoys in DARWARS! Ambush.

- Developed improved authoring tools for Navy training targeted at improving readiness for 40,000 recruits annually. Prototyped system using Java in Eclipse. Published paper in I/ITSEC 2008.

- Ran a pilot program creating customizable artificial characters for game-based training.

Operation Kalpataru — Cambridge, MA
Consultant — June 2006 – July 2006

- Designed software user interface and developed project management plans for software running on inexpensive laptops to improve the effectiveness and sustainability of microfinance in Bangladesh.

Animated Speech Corporation — San Francisco, CA
Consultant — May 2005 – January 2006

- Created experimental protocols and wrote product plans for a learning tool using views of an animated head to teach articulation, vocabulary, and narrative skills to deaf, autistic, hard of hearing, and speech-impaired children.

Media Lab Europe — Dublin, Ireland
Research Associate — September 2003 – September 2004

- Created multimodal user interfaces for desktop and mobile devices for use by blind and deaf users in multiple languages as part of an European Union-supported project on spoken user interfaces. (FASiL) Published and presented papers on the FASiL UI at COLING 2004 and HLT/NAACL-04.

- Created an interactive DVD of a theater workshop, including scene selection, audio track overlay, editing, DVD design, and technical production. Mentored theater artists on using technology in performance.

Comverse Network Systems (formerly InTouch Systems) Cambridge, MA
Software Engineer, Consultant August 1998 – January 2003
- Designed and implemented voice user interfaces for telephone-based personal assistants with voice dialing, message management, to do lists, calendars, and caller interfaces, including the Sprint PCS Voice Command feature available to 40 million subscribers.
- Created and managed the nine-person Language Group, which created designs, prototypes, and deliverable voice user interfaces in five languages.
- Developed a corporate patent portfolio of voice and messaging features. Named inventor on two issued patents. Consultant on five additional issued patents and numerous patents still in process. Published paper in the International Journal of Speech Technology.

MIT Media Lab Cambridge, MA
Research Associate, Teaching Assistant June 1996 – June 1998
- Collaborated on *Gandalf* and *REA*, conversational characters who interacted with users via speech, intonation, and gesture to talk about shared presence in a virtual world (a tour of the solar system and of various houses, respectively).
- System design and Java coding of CrossTalk, a tabletop-sized multi-user wooden keyboard for public social interaction, and other parts of the Literary Salon. Crosstalk was exhibited in SIGGRAPH 1999.

MIT Artificial Intelligence Lab Cambridge, MA
Undergraduate Researcher September 1994 – June 1996
- Built and tested brain circuitry for Cog, a humanoid robot.

PCG, Inc. San Francisco, CA
Software Engineer 1990 – 1995
- Designed and developed a client server database application for tracking students, test scores, and English proficiency, in PowerBuilder, C and Sybase SQL Server.

Education **Massachusetts Institute of Technology** Cambridge, MA
M.Eng. in Electrical Engineering and Computer Science, June 1998
Thesis: Recognizing Intonational Patterns in English Speech
B.S. in Electrical Engineering and Computer Science, June 1998
Coursework: Storytelling and Games in the Digital Age, sponsored by Sony Pictures Imageworks and MIT Comparative Media Studies, January 2005, Computer Graphics, Discourse.

Personal I love stories: the stories I heard from people when I was running a Red Cross shelter after hurricane Katrina; the stories I tell about users of the software I design; the stories I've enabled as technical run crew for shows; and the stories I make up as I write children's books and plays. I want to use my background in technology to tell stories, and help make it easier for others to tell their stories.

Eligible for Department of Defense Clearance