

Susan L. Spraragen

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Research Objectives

Driver for usability and human factors applied to engineering of systems and interfaces for better user experiences and marketability. My work focuses on the dynamics between technology developers and technology users so as to bring joy, understanding, efficiency, and efficacy to the workplace of both communities.

Experience - IBM TJ Watson Research Center, Hawthorne, New York USA

2006 – Present

User Experience Researcher

Initiated, promoted, and constructed methods for applying service design techniques to IBM Services. Conducted service blueprinting workshops with service teams needing to develop a collective, and complete visual representation of customer provider activities and relationship status throughout the course of service engagements.

1999 – 2006

Advisory Usability Engineer

Lead usability efforts in numerous projects atypical for employing user centered design methodologies. Most recently, engaged with a business process transformation project team to provide methods and web interface for managing complex data. Past projects include a data management tool, improving pervasive programming development environments, and concept development and testing for the viability and usability of a high density Web data sliders used for browsing the music catalogue of Philip Glass.

1996 – 1999

Project Leader

Lead the design, development, testing, and deployment of the software and the design and installation of the physical structure of 21 way-finding kiosks and staff applications at the American Museum of Natural History in NYC while coordinating this effort with Museum departments to insure continued success.

1994 – 1996

Project Leader

Lead the design, development, testing and installation for 10 reservation, way-finding and reservation kiosks and staff applications at the Science Industry and Business Library of New York Public Library. Years later, these applications remained integral to the daily operations at the library, as they continued to serve a demanding public and to save staffing costs.

1989 – 1994

Application Developer – Interactive Transaction Systems

Using research software programming techniques for rapid, iterative prototyping, our team designed, implemented and deployed direct customer access systems. We successfully designed and installed software application and kiosk structure for filing online unemployment forms at the Illinois Department of Employment Security. These kiosks allowed users to accurately file personal data and history, allowing staff more time for job counseling. Earlier our efforts were deployed on over 230 kiosks at the EXPO'92 World's Fair in Seville Spain. There I designed, programmed, tested, and deployed the audio and video capture features of the EXPO'92 Guest Services System. The innovative user interface for these multimedia features not only led to a patent - they proved to be very popular for this international user set. Thousands of family images and personal voice recordings were created each week during the six-month fair.

Education

MA, Columbia University, Teachers College, Computers and Communications, 1990
BA, University of Rochester, Statistics, 1983

Patents

US Patent 6,006,200 Method of Providing an Identifier for Transactions; issued December 21, 1999.
US Patent 5,426,732 Method and Apparatus for User Control by Deriving Next States of a Process from a Current State and by Providing a Visual Presentation of the Derived Next Step; issued June 20, 1995.

Publications

“Pegboard: A Framework for Developing Mobile Applications”, Danny Soroker, Ramon Caceres, Daniel Dig, Andreas Schade, Susan Spraragen, Alpna Tiwari, The Fourth International Conference on Mobile Systems, Applications, and Services (MobiSys 2006).

“The Challenges in Creating Tools for Improving the Software Development Lifecycle”, Susan Spraragen, 27th International Conference on Software Engineering, workshop on Human and Social factors of Software Engineering (ICSE 2005), May 2005.

“Document models and XML Vocabulary Building for Business Users,” Douglas Lovell, Susan Spraragen, XML2004 Conference, Nov. 2004.

“Personal Information Management and Distribution,” Kathy Bohrer, Xuan Liu, Dogan Desdogan, Edith Schonberg, Moninder Singh, Susan L. Spraragen, 4th International Conference on Electronic Commerce Research (ICECR-4), Nov. 2001.

“A High-Density Catalog for Online Browsing,” Susan L. Spraragen, Mark Podlaseck, HICSS '34 Hawaii International Conference on System Sciences, Jan. 2001.

“Flexible Software Interface Design,” Susan L. Spraragen, Amnon Ribak, Ergonomics in Design, October 1999.

“Extending user-centered methods beyond interface design to functional definition,” J.F. Kelley, S.L. Spraragen, L. Jones, S.L. Greene, S. Boies, Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting, 1996.

Awards

IBM Technical Group Award, 1992.

IBM Outstanding Technical Achievement Award, 1993.

IBM Research Division Commercialization Achievement Award, 1995.

Human Factors and Ergonomics Society Alexander C. Williams, Jr. Design Award, 1996 for "outstanding contribution of human factors to a major operational system" (EXPO'92 Guest Services System).

Professional Affiliations

Member Human Factors and Ergonomics Society

Senior Editor of *Ergonomics in Design*, a Human Factors and Ergonomics Society publication