**IBM**®

**John F. ("Jeff") Kelley, Ph.D., CHFP**
Master Inventor, Certified Sr. Managing Consultant, IBM Interactive
Adjunct Professor, Georgia Tech, Engineering Psychology
JFKUsability@us.ibm.com   706-MAD-DIAL (US)

Jeff Kelley is an IBM Master Inventor and IBM-Certified Senior Managing Consultant with the User Research and Design National Practice (URD) of IBM Interactive (a subdivision of IBM Global Business Services).  As a senior consultant and team leader, Jeff has been involved in most aspects of client engagements, including proposal development, requirements analysis, solution design and delivery, prototyping, interface design innovation, development coding (Java & Web client), and stakeholder/customer interaction.

Jeff has also assumed the role of user experience architect (and Project Manager) in the URD practice, specializing in the design and development of user interfaces and all aspects of user experience for internet, intranet, desktop, mobile, kiosk, and pervasive computing applications.

Having spent 18 years at the T.J. Watson Research Center before joining the URD practice, Jeff has 30 years of leadership experience in user interface design, development and architecture efforts for consumer and B2B transactional systems, desktop, pervasive and kiosk applications in the consumer, government, banking, loans, finance, accounting, e-learning, automotive, museum, military, and "infotainment" industries.

In recent engagements, while working on teams using established methodologies, Jeff has 1) created award-winning user-interface designs and has developed sophisticated, table-driven, high-fidelity prototypes for rapid iterative design as well as the associated iterative User-Centered Design procedures and interactive style guides for corporate and government finance and security applications and websites, 2) led development of patented, innovative B2B and consumer web designs and style guidance for aggregated display of complex information from multiple legacy sources for traders at a large global bank and for a multi-national services company, 3) guided transition of prototypes into production code (html, js, css, xml, ws portal, jsp, jsf), 4) developed and published AgileRemote extensions to existing Agile Software Development and other design/development methodologies for gathering, merging and implementing stakeholder and user requirements, 5) designed a patented, multi-vendor authoring and catalog systems for a desktop visual corporate purchasing system, and 6) designed and implemented international, award-winning walk-up-and-use, transactional, touch-screen kiosk systems (hardware ergonomics and software applications), 7) developed table-driven, rapid-prototyping tools for modeling Websphere Portal applications, 8) mentored new User Experience groups for commercial clients, transferring user-centered, rapid prototyping tools and techniques.

Jeff is a 2007 and 2012 winner of the IBM Service Excellence Award.  In 2010, Jeff was recognized with his second prestigious IBM Outstanding Technical Achievement Award for his collaborative AgileRemote tooling and methodology which brings bring user-centered techniques to application development, from requirements definition, through design, to development and implementation.

From 2004 through 2005, Jeff Kelley worked at SA Technologies as Program Manager for UI design for the Warfighter Machine Interface Services group in the U.S. Army's FCS (Future Combat Systems) project.  In that role Jeff managed the warfighter-centered requirements gathering and iterative design work of 6 design teams and 3 support teams, including usability testing. This included supervising GDTA (Goal Directed Task Analysis) requirements gathering based on warfighter interviews, construction of goal trees, function analyses and function allocations to drive Situation Awareness based automation in the FCS runtime application.   Jeff also supervised Army role-based GUI designs for all the mission and command-and-control applications that are being rolled out for the Army's new, networked, modular force.  Jeff collaborated with FCS partners in MANPRINT and technology integration efforts (hardware and software) and designed a Flash prototyping framework for use in design and usability testing.   Jeff also refined processes in use by the Lead System Integrator (Boeing) for FCS Program CMM Level 3 certification (and beyond).

Jeff has pioneered and published User Centered Design methodologies (for example, inventing the "Wizard of OZ" simulation technique now widely used in user-computer interface design activities).  As co-chair of IBM's Agile + User Experience workgroup, Jeff has practiced and published methodological extensions to Agile to incorporate User-Centered Design, Usability Engineering, and high-fidelity prototyping into large Agile projects with short cycle/iteration times.   Jeff is also Chair of the IBM User Experience Community of Practice, is a member of the IBM's Smarter Cities Strategy Study, and was the social computing lead in the Transportation and Logistics group of the IBM Academy of Technology's Green IT Initiative.

Jeff has 18 inventions published in the *Technical Disclosure Bulletin* and holds another 18 patents (issued and pending) on subjects as diverse as website design, automotive telematics and driver distraction, solar power, electronic purchasing, pervasive computing display technology, materials handling, gearing mechanisms, ice makers, satellite technology, computer security, and alternate computer input devices. A sampling of Jeff's papers can be found in *Ergonomics In Design, ACM Transactions on Office Information Systems*, the *Journal of Occupational Psychology, World Design Now,* and proceedings of the *Human Factors and Ergonomics Society, ACM SIG-CHI,* the *International Ergonomics Association* and the *International Conference on Supercomputing Systems.*

Jeff has formal training and hands-on experience developing production code with a variety of user-centered and object-oriented design methodologies. He has development experience with DHTML, XHTML, XML, JavaScript, Dojo, JSP, Websphere Portal, Java, DB2, the Sun Swing class set, Smalltalk, C/C++, Rexx, Perl, Lotus Script, Visual Basic, APL, SQL, BookMaster and Fortran. Jeff is familiar with a variety of operating systems and is conversant with many applications, including MS Office, Lotus SmartSuite and Notes, Rational Tools, Eclipse/Websphere Application Developer, Websphere Business Modeler, Drupal, Cognos, Visual Age for Java, Websphere/Netscape/Apache web servers, CMVC, QMF, Adobe Photoshop and Illustrator, Visio, CorelDraw, Macromedia DreamWeaver and Fireworks, Quark Express, Image Alchemy, SPSS/SAS statistical packages, as well as various social computing and Web 2.0 technologies.

Jeff holds a B.A. in Human Factors and an M.A. in Ergonomics from the University of California at Santa Barbara (Dean's List, Scholar's Program), as well as an M.A. in Experimental Psychology and a Ph.D. in Engineering Psychology from The Johns Hopkins University in Baltimore, MD (where he studied under a fellowship from the National Institutes of Mental Health and was a student of the late, esteemed founder of HFES, Alphonse Chapanis). Jeff is a Fellow of the Human Factors and Ergonomics Society (HFES) and a Fellow of the Institute of Ergonomics & Human Factors in the U.K.

Jeff is also a board-certified Human Factors Professional/Ergonomist and winner of the prestigious Alexander C. Williams Jr. Award from HFES for "outstanding human factors contributions to the design of a major operational system". Active in HFES, Jeff was four times Chair of the Technical Program Committee, Chair of the Computer Systems Technical Group, Editor of the *CSTG Bulletin*, Editor of *Ergonomics In Design*, and Chair of the Council of Technical Groups.

Jeff was the 2008 President of the Human Factors and Ergonomics Society (HFES.org). He was also Chair of the Information Technology Committee for the Council of Scientific Society Presidents in Washington, DC. Jeff was recently elected to a 3-year position on the HFES Executive Council and is currently an incoming Director on the Board of Certification in Professional Ergonomics (BCPE.org).

Jeff enjoys an appointment as adjunct associate professor in the department of Engineering Psychology at the Georgia Institute of Technology.

Jeff's avocational interests include semi-professional choral singing and building transactional websites for choral, scientific and other not-for-profit organizations.