WILLIAM J. VIGILANTE JR., PhD, CPE
Human Factors / Ergonomics Expert

HUMAN FACTORS and ERGONOMICS EXPERIENCE

Over 25 years of experience in the researching, designing, and evaluating driver performance, roadway safety, pedestrian safety, control-display design, consumer and commercial products and equipment, safety and hazard analyses, risk perception, and design of warnings and instructional materials.

- **Warnings**: Assess the adequacy of warning labels, signs, and user manuals to communicate hazards, motivate compliance, and improve safety. Assess the effect of the warning design and presentation as well as situational and inter/intra personal factors on compliance and risk taking behavior. Assess the effectiveness of in-vehicle advance warning systems on collision avoidance.
- **Vision and Driving**: Assess issues related to visual perception, reaction time, and expectancies along with lighting and roadway conditions related to vehicle collisions. Investigation of pedestrian knockdown collisions, collisions involving stop or slow-moving vehicles, and collisions related to lack of positive guidance and adequate roadway signage.
- **Motorcycle**: Assess rider actions and visibility.
- **Slips, Trips, and Falls**: Determine how attention and perceptual issues affect a person's ability to detect and avoid slip, trip, and fall hazards. Standard of care for building owners/operators and retailers to ensure safe walking surfaces in public spaces.
- **Work Place Safety**: Assess work place and equipment design and safety procedures on incident occurrence and prevention.
- **Recreational and Sporting Activities**: Perceptual abilities and reaction times and how these human factors affect people's ability to safely interact with recreational vehicles, sporting equipment, firearms, and swimming pools.
- **Lighting**: Environmental lighting analysis and its effect on people's ability to notice and recognize walkway and roadway hazards.
- **Accessibility**: Evaluating consumer and commercial products to meet Section 508 of the Americans with Disabilities Act.
- **Aging**: Assess the effects of aging on older adult's ability to read product labels and warnings; operate motor vehicles including night driving and vision, perception/reaction time and roadway navigation; and wayfind in the built environment including the effects of changes in gait, walking ability, and detecting and avoiding walkway hazards.
- **Medication Labeling**: Assess people's ability to notice, read, and understand medication labeling and advertising.
- **Product Design and Development**: Developed a variety of hardware and software interfaces and support materials for a wide range of consumer and commercial products, including: graphical user interface designs, laptop and desktop computer systems, wireless systems, input devices, storage devices, visual displays, user guides, installation wizards, safety manuals, web sites, and an eXtensible markup language (XML).
- **User Centered Design**: Carried out User Centered Design processes and activities within all phases of the product design and development cycle, including: task analyses, competitive evaluation, focus groups, iterative usability testing, and design validation.

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PROFESSIONAL EXPERIENCE

2015 to Present — **Vigilante Consulting, LLC d/b/a Vigilante Forensic**
Principal
Provide technical investigations, analysis, reports, and testimony toward the resolution of commercial and personal injury litigation involving human factors/ergonomics, safety and risk perception, warning design, product design and development, industrial/workplace safety, roadway safety, driver performance and night vision, and premises safety.

2003 to 2015 — **Robson Forensic, Inc.**
Associate
Provide technical investigations, analysis, reports, and testimony toward the resolution of commercial and personal injury litigation involving human factors/ergonomics, safety and risk perception, warning design, product design and development, industrial/workplace safety, roadway safety, driver performance and night vision, and premises safety.

Fournier Robson, Inc.
Consulted with manufacturers in the design, development, and/or assessment of product warnings and accompanied literature for consumer and commercial products.

2001 to 2003 — **ARCCA, Inc.**
Forensic Scientist
Consultant for consumer product and safety hazard litigation. Provided background research, written reports, and testimony.

1998 to 2003 — **International Business Machine Corporation**
Human Factors/Usability Engineer Consultant *2003*

- Worked with internal IBM clients to conduct usability studies; report user feedback data and recommendations; and transform results and recommendations into product design decisions.
- Provided human factors support in the design and development of a data mining program used to research and create action plans for failures reported from in-the-field storage servers.
- Provided human factors support in the design and development of storage servers and tape library systems.
- Provided usability support and evaluation in the design and development of IBM's eXtensible Markup Language (XML) and software interface updates to the IBM information development editors that support the new XML.

Human Factors Engineer 1998-2002

- Human Factors Engineer for the IBM Software Group designing, developing, and end user testing various internet and intranet websites (1998).
- User Centered Design (UCD) team lead for the IBM Personal Computing Division's Options by IBM (1999,2000), T and S series ThinkPad laptop computers and wireless development (2001,2002).
- Initiated and implemented software and hardware product design changes resulting from focus groups, iterative usability testing, and heuristic reviews during the product development cycle.

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- Conducted competitive assessments to evaluate products ease-of-use against major market competitors.
- Inputted into the functional specifications and designed the user interface for the IBM Access ConnectionsTM network connection wizard.
- Section 508 Accessibility assessment of products developed within the ThinkPad and Options development teams.
- Worked within a cross-industry team to define user interface specifications and guidelines for the development of SIG qualified Bluetooth products.
- Worked with IBM Retail Store Solutions analyzing customer movement through the front of store for national retailers to improve point of sale efficiency.

1997 **International Business Machine Corporation**
Human Factors Engineer Co-op
Developed and conducted focus groups and usability test sessions for the assessment of various Internet and Intranet web sites. Developed and implemented web based surveys to obtain user data. Recommended and implemented design changes based on usability results.

1995 **Pennsylvania State University, Center for Cumulative Trauma Disorders**
Ergonomics Researcher
Performed on-site video recording, data collection, and data analysis for biomechanical task analysis. Collaborated with other team members to identify injury risk factors and develop solutions to reduce or eliminate worker exposure.

1994 to 1997 **North Carolina State University, Department of Psychology**
Academic Advisor
Implemented and maintained an academic advising program for the psychology department. Responsible for advising undergraduate psychology students in scheduling their course work and progression towards a B.S. degree.

RESEARCH EXPERIENCE

1994 to 2001 **North Carolina State University, Department of Psychology**
Research Assistant
Conducted research examining the factors that affect the adequacy of warnings and product user risk perception. Specialized in the format and layout designs of operator manuals, on-product warnings and instructions, and Direct-to-Consumer web site advertisements for prescription medications. Supervised undergraduate students in a grant project focusing on the readability of over-the-counter medication labels. Worked with students from the NCSU Cognitive Ergonomics lab in developing original research projects related to visual and auditory warnings and risk perception.

1992 to 1993 **University of Scranton, Department of Psychology**
Research Assistant
Conducted literature reviews, designed a computer program for a reaction time experiment, collected and analyzed data. Instructed and proficiency tested students in word processing programs and statistical applications. Worked with students developing original research projects. Conducted literature reviews, collected data, analyzed results, and performed other research duties for a research study examining the prediction of relapse rates for dually diagnosed psychiatric in-patients.

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EDUCATION

Ph.D., Psychology/Ergonomics, North Carolina State University, Raleigh, NC, 2001
M.S., Psychology/Ergonomics, North Carolina State University, Raleigh, NC, 1997
B.S., Psychology/Cognitive Track, University of Scranton, Scranton, PA, 1993

PROFESSIONAL CERTIFICATION

Board of Certification in Professional Ergonomics, CPE #2019

WORKSHOPS and CONTINUING EDUCATION

- Roadway Lighting Design
  - IESNA: IES Webinar, September 2020
- Roadway Photometrics
  - IESNA: IES Webinar, July 2020
- ANSI/IES-RP-8-18: Practice for Design and Maintenance of Roadway and Parking Facility Lighting
  - IENSA: IES Webinar, May 2019
- Industrial Lighting Facilities, RP-7
  - IESNA: IES Webinar, February 2019
- ASHRAE 90.1 Lighting Model:
  - IESNA: IES Webinar, December 2018
- A New Measure for Color Discrimination:
  - IESNA: IES Webinar, November 2018
- Lighting for Residential Environments:
  - IESNA: IES Webinar, July 2018
- The Smart City / IoT Update for the ANSI/IES Roadway Lighting Control System Standard (DG-28),
  - IESNA: IES Webinar, January 2018
- RP-28 Lighting and the Visual Environment for Seniors and the Low Vision Population:
  - IESNA: IES Webinar, 2017
- Ensuring Pedestrian Safety in Work Zones:
  - Webinar 28961. The American Traffic Safety Services Association. September 2012
- Stairway Usability and Safety, Part 1: Uses and Falls by Individuals:
  - Workshop 1: Human Factors and Ergonomics Society 51st Annual Meeting. October, 2007 Instructor: Jake Pauls
- There Goes the Sun: Driver Vision and Behavior during Dusk and Darkness Workshop 145:
  - 86th TRB Annual Meeting January 2007. Instructors: John D. Bullough, Rensselaer Polytechnic Institute; James R. Sayer, University of Michigan Transportation Research Institute; David M. Burns, 3M Company
- Human Factors Principles in Auditory Displays and Warning Signal Design
  - Workshop 8: Human Factors and Ergonomics Society 49th Annual Meeting. September, 2005. Instructors: John G. Casali & Jeff A. Lancaster, Virginia Tech
- Sound/Noise Measurement Basics with Specific Application to Human Factors Research and Practice

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  - Workshop 12: Human Factors and Ergonomics Society 48th Annual Meeting. September, 2004. Instructors: John G. Casali & Gary S. Robinson, Virginia Tech
- Risk Assessment and Human Reliability: Some Practical Tools for Improving Safety
  - Workshop 125: 83rd TRB Annual Meeting. January 2004. Instructors: Dennis C. Bley & John Wreathall, The WreathWood Group; Joseph Myers, US Coast Guard; Emile Roth, Roth Cognitive Engineering
- Human Factors Approach to Accident Analysis and Prevention
  - Workshop 2: Human Factors and Ergonomics Society 47th Annual Meeting. October 2003. Instructors: Scott A. Shappell, Federal Aviation Admin.; Douglas A. Wiegmann, University of Illinois

CURRENT/PAST CERTIFICATIONS

- IPAF Operator Training: Static Boom (1b). Certificate No. AOP/0016099, September 2017
- Raymond "Safety on the Move" Forklift Certification Program (Stand-up/Sit-down Reach/Counterbalanced trucks), Jan 2014
- FIRECON Safety and Emergency Response Training, Confined Space Safety (certificate No. 10952), July 2009
- Motorcycle Safety Foundation:
  - Basic Rider Course (certificate)
  - Off-Highway Motorcycle Course (certificate)
- National Rifle Association Instructor Certification for Certified Rifle, Certified Pistol, Personal Protection In the Home, Personal Protection Outside the Home, and CCW Instructor

PROFESSIONAL MEMBERSHIPS and AFFILIATIONS

Member:

- American Society of Safety Professionals
- ANSI Z535 committee (representative for the HFES)
- Human Factors and Ergonomics Society (HFES)
  - Product Design Technical Group (past) Program Chair
  - Safety Technical Group (past) Program Chair
- Illuminating Engineering Society
- Transportation Research Board

Reviewer:

- Applied Ergonomics
- Ergonomics
- Human Factors and Ergonomics in Manufacturing
- International Journal of Human Factors and Ergonomics
- Proceedings of the Annual Human Factors and Ergonomics Society Meeting
- User-Centered Consumer Product Design Award: HFES Product Design Technical Group

EXPERT NOT RETAINED

PUBLICATIONS and PRESENTATIONS

Eckhardt, B. J., Vigilante, W. J., Jr., & Coste, P. F. (2012) Visibility Factors in Small Boat Collisions. Presented at the 2012 International Marine Forensics Symposium. National Harbor, MD: The Society of Naval Architects and Marine Engineers & American Society of Naval Engineers.

Hicks, K. E., Vigilante, W. J., Jr. & Wogalter, M. S. (2001). Relative placement of benefit and risk information in direct-to-consumer advertisements of prescription drugs on the World Wide Web. In Proceedings from the Human Factors and Ergonomics Society 45th Annual Meeting (pp. 1196-1200). Santa Monica, CA: The Human Factors and Ergonomics Society.

Hicks, K. E., Wogalter, M. S., & Vigilante, W. J., Jr. (2005). Placement of benefits and risks in prescription drug manufacturers' Web sites and information source expectations. Drug Information Journal, 39 (3), 267.

Joyce, K. M., Byrd, T. G., Vigilante, W. J., Jr., & Wogalter, M.S. (1999). Over-the-counter (OTC) drug labeling: format preferences. Presented at the 107th Annual Convention of the American Psychological Association. Boston, MA: American Psychological Association.

Lim, R. W. & Vigilante, W. J., Jr. (2010). Consumers' interpretation of the statement: "Do not leave [insert product here] unattended." In Proceedings of the Human Factors and Ergonomics Society 54th Annual Meeting (1841 – 1845). Santa Monica, CA: The Human Factors and Ergonomics Society.

Lim, R. W., Keshishian, P., Hernandez, J., and Vigilante, W. J., Jr. (2008). Parent's expectations and beliefs toward the relative safety of their children riding bicycles at night. In Proceedings of the Human Factors and Ergonomics Society 52st Annual Meeting (1703-1707). Santa Monica, CA: The Human Factors and Ergonomics Society.

Lim, R. W. & Vigilante, W. J., Jr. (2007). Middle-school-aged children's expectations and beliefs toward the relative safety of riding bicycles at night. In Proceedings of the Human Factors and Ergonomics Society 51st Annual Meeting (1383-1387). Santa Monica, CA: The Human Factors and Ergonomics Society.

Nemire, K. & Vigilante, W.J., Jr. (2015). A call for updating the FHSA regulations with warnings research and to match ANSI Z535.4. In Proceedings from the Human Factors and Ergonomics Society International 59th Annual Meeting (pp. 1471-1475). Santa Monica, CA: The Human Factors and Ergonomics Society.

Turina, M., Schaible, R., Vigilante, W. J., Jr. (2009). Forensic ergonomics: theory and practice. Paper presented and abstract published at the 41st Annual Conference of the Nordic Ergonomics Society. LO-Skolen, Helsinøre, Denmark: Nordic Ergonomics Society.

Tomcho, T. J., Vigilante, W. J., Jr., Church, M. A., Truscott, J. W., & Alford, B. A. (1993). Self-concept as a predictor of therapeutic response in dual-diagnosed psychiatric inpatients. Paper presented at the 64th meeting of the Eastern Psychological Association. Arlington, VA: Eastern Psychological Society.

Vigilante, W.J., Jr. (2018). Chapter 21: Working out of view. In Forensic Human Factors and Ergonomics: Case Studies and Analyses. Pgs. 315 – 336.

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Vigilante, W. J., Jr. (2005). Consumer beliefs toward the protection offered by motorcycle helmets: the effects of certification, price, and crash speed. In Proceedings from the Human Factors and Ergonomics Society 49th Annual Meeting (pp. 862-866). Santa Monica, CA: The Human Factors and Ergonomics Society.

Vigilante, W. J., Jr. (2001). Direct-to-Consumer (DTC) advertising of prescription medications on the World Wide Web: assessing the communication of risks and benefits. Dissertation Abstracts International, 63, 341.

Vigilante, W. J., Jr. (1998). Product manual safety warnings: the effects of ordering. In Proceedings from the Human Factors and Ergonomics Society 42nd Annual Meeting (pp. 593-597). Santa Monica, CA: The Human Factors and Ergonomics Society.

Vigilante, W. J., Jr. (1997). Product manual safety warnings: the effects of ordering. North Carolina State University. Masters Thesis.

Vigilante, W. J., Jr. & Fuccella, J. (Dec. 1997). eNetwork Web Site Survey Results. IBM Area Presentation, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. & Lim, R.W. (2024). Hunting from elevated tree stands: hunters' safety practices and attitudes regarding the use of Personal Fall Arrest Systems – Update. In Proceedings of the Human Factors and Ergonomics Society 68th Annual Meeting. https://doi.org/10.1177/10711813241260741

Vigilante, W. J., Jr. & Lim, R.W. (2010). Chapter 108: Hazard Perceptions of Consumer Products. In W. Karwowski and G. Salvendy (Eds.) Advances in Human Factors, Ergonomics, and Safety in Manufacturing and Service Industries (Ed.). Boca Raton, FL: CRC Press.

Vigilante, W. J., Jr. & Lim, R.W. (2010). Hazard Perceptions of Consumer Products. In Proceedings of the 3rd International Conference on Applied Human Factors and Ergonomics. Louisville, KY: AHFE International.

Vigilante, W. J., Jr. & Lim, R. W. (2006). Children's expectations and beliefs toward the relative safety of riding bicycles at night. In Proceedings of the 16th World Congress on Ergonomics (pp. 1381-1386). Roma, Italy: International Ergonomics Association.

Vigilante, W. J., Jr., Mayhorn, C., & Wogalter, M.S. (2007). Direct-to-Consumer (DTC) prescription drug advertising on television and online purchases of medications. In Proceedings of the Human Factors and Ergonomics Society 51st Annual Meeting (pp. 1272-1276). Santa Monica, CA: The Human Factors and Ergonomics Society.

Vigilante, W. J., Jr. & Reeves, P. (2012). Human factors related to programmable thermostats: consumers knowledge and perceptions related to product use and hazards. In Proceedings from the Human Factors and Ergonomics Society 56th Annual Meeting (pp.680-684). Santa Monica, CA: The Human Factors and Ergonomics Society.

Vigilante, W. J., Jr., & Reeves, P. & Lim, R. (2014). Hunting from elevated tree stands: hunter's safety practices and attitudes regarding the use of personal fall arrest systems. In Proceedings from the Human Factors and Ergonomics Society 58th Annual Meeting (pp. 1874-1878). Santa Monica, CA: The Human Factors and Ergonomics Society.

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Vigilante W. J, Jr., & Rhoades, T., Arndt, S, & Cohen H.H. (2009). Forensic human factors/ergonomics practice from the perspective of the forensic consulting firms. In Proceedings of the Human Factors and Ergonomics Society 53rd Annual Meeting (pp. 546-548). Santa Monica, CA: Human Factors and Ergonomics Society.

Vigilante, W. J., Jr., & Wogalter, M. S. (2005). Assessing risk and benefit communication in direct-to-consumer medication Web site advertising. Drug Information Journal, 39(1), 3.

Vigilante, W. J., Jr., & Wogalter, M. S. (2001). Direct-to-consumer (DTC) advertising of prescription medications on the World Wide Web: assessing the communication of risks. In Proceedings from the Human Factors and Ergonomics Society 45th Annual Meeting (pp. 1279-1283). Santa Monica, CA: The Human Factors and Ergonomics Society.

Vigilante, W. J., Jr., & Wogalter, M. S. (1999). Over-the-counter drug labeling: format preferences. In Proceedings from the Human Factors and Ergonomics Society 43rd Annual Meeting (pp. 103-107). Santa Monica, CA: The Human Factors and Ergonomics Society.

Vigilante, W. J., Jr., & Wogalter, M. S. (1998). Older adults' perception of OTC drug labels: print size, white space, and design type. Presented at the International Occupational Ergonomics and Safety Conference XIIIth Annual Meeting. Ann Arbor, MI: The International Occupation Ergonomics and Safety Society.

Vigilante, W. J., Jr., & Wogalter, M. S. (1997). On the prioritization of safety warnings in product manuals. International Journal of Industrial Ergonomics, 20(4), 277-285.

Vigilante, W. J., Jr., & Wogalter, M. S. (1997). The preferred order of over-the-counter (OTC) pharmaceutical label components. Drug Information Journal, 31(3), 973-988.

Vigilante, W. J., Jr., & Wogalter, M. S. (1996). The ordering of over-the-counter (OTC) pharmaceutical label components. In Proceedings from the Human Factors and Ergonomics Society 43rd Annual Meeting (pp. 141-145). Santa Monica, CA: The Human Factors and Ergonomics Society.

Vigilante, W. J., Jr., & Wogalter, M. S. (1996). The ordering of safety warnings in product manuals. In A. Mital, H. Krueger, S. Kumar, M. Menozzie, and J. E. Fernandez (Eds.), Advances in Occupational Ergonomics and Safety. Amsterdam: IOS Press.

Wogalter, M. S., Conzola, V. C., & Vigilante, W. J., Jr. (2006). Chapter 38: Applying usability engineering principles to the design and testing of warning text. In M. S. Wogalter (Eds.) Handbook of Warnings. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Wogalter, M. S., Conzola, V. C., & Vigilante, W. J., Jr., (1999). Applying usability engineering principles to the design and testing of warning messages. In Proceedings from the Human Factors and Ergonomics Society 43rd Annual Meeting (pp. 921-925). Santa Monica, CA: The Human Factors and Ergonomics Society.

Wogalter, M. S., Magurno, A. B., Carter, A. W., Swindell, J. A., Vigilante, W. J., Jr., & Daurity, J. G. (1995). Hazards associations of warning header components. In Proceedings from the Human Factors and Ergonomics Society 39th Annual Meeting (pp. 979-983). Santa Monica, CA: The Human Factors and Ergonomics Society.

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Wogalter, M. S., & Vigilante, W. J., Jr. (2006). Chapter 18: Attention switch and maintenance. In M. S. Wogalter (Eds.) Handbook of Warnings. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Wogalter, M. S., & Vigilante, W. J., Jr. (2003). Effects of label format on knowledge acquisition and perceived readability by younger and older adults. Ergonomics, 46(4), 327-344.

Wogalter, M. S., & Vigilante, W. J., Jr. (2001). Formatting Print on OTC Drug Labels to Benefit Seniors' Knowledge Acquisition Performance. In Proceedings from the Human Factors and Ergonomics Society 45th Annual Meeting (pp. 1481). Santa Monica, CA: The Human Factors and Ergonomics Society.

Wogalter, M. S., Vigilante, W. J., Jr., & Baneth, R. C. (1998). Availability of operator manuals for used consumer products. Applied Ergonomics, 29(3), 193-200.

TECHNICAL REPORTS

Calcaterra, J., Sawin, D., Vigilante, W. J., Jr., & Ray, R. (August, 2002). Access connections usability test report. IBM Technical Report # 29.3557, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Krauss, F. S. H. & Vigilante, W. J., Jr. (September, 2002). A comparative study of alternative design for the IBM Microelectronics Internet Web site. IBM Technical Report # 29.3573, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Krauss, F. S. H. & Vigilante, W. J., Jr. (February, 2002). A Reference Guide for Remote Usability Activities Using NetMeeting and Sametime. IBM Technical Report # 29.3493, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Stewart, A. & Vigilante, W. J., Jr. (January, 2002). IBM monitor design recommendations. IBM Technical Report # 29.3491, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Stewart, A. & Vigilante, W. J., Jr. (July, 2001). IBM on-screen display (OSD) specifications for CRT and TFT monitor menus. IBM Technical Report # 29.344, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (June, 2003). XML DITA post-beta CUPRIMDSO survey. IBM Technical Report # 29.3656, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (May, 2003). XML DITA post-beta program online survey. IBM Technical Report # 29.3648, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (March, 2003). DITA trademark UCD test session results. IBM Technical Report # 29.3625, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (January, 2003). DITA language reference guide usability assessment. IBM Technical Report # 29.3609, Internal Use Only. Research Triangle Park, NC: International Business Machine.

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Vigilante, W. J., Jr. (November, 2002). DITA map usability evaluation. IBM Technical Report # 29.3595, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (October, 2002). MetaDor map editor usability evaluation. IBM Technical Report # 29.3585, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (September, 2002). Epic DITA map Relationship table usability assessment. IBM Technical Report # 29.3576, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (September, 2002). Yield Management Web site utility design walkthrough and accessibility review. IBM Technical Report # 29.3574, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (August, 2002). Epic, Frame2000, and XMetaL feature survey. IBM Technical Report # 29.3561, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (August, 2002). Iterative evaluation of the information development workbench transform UI. IBM Technical Report # 29.3555, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (June, 2002). Comparison of usability testing methodologies. IBM Technical Report # 29.3534, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (June, 2002). Epic and Frame2000 XML editor usability recommendations. IBM Technical Report # 29.3533, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (June, 2002). IBM XML DITA usability recommendations. IBM Technical Report # 29.3532, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (June, 2002). XMetaL 3.0 Editor Usability Evaluation. IBM Technical Report # 29.3531, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (Oct, 2000). IBM High Rate Wireless LAN PC card: usability test and competitive evaluation. IBM Technical Report # 29.338, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (August. 2000). Personal Systems Group (PSG) eCIM usability study. IBM Technical Report # 29.3393, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (February, 2000). Options by IBM (OBI) Tape drive focus group study. IBM Technical Report # 29.3381, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. (Dec. 1999). IdeaScan 2000 usability study and competitive evaluation. IBM Technical Report # 29.3258, Internal Use Only. Research Triangle Park, NC: International Business Machine.

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Vigilante, W. J., Jr. (August 1999). Personal Systems Group (PSG) web site study and competitive analysis. IBM Technical Report # 29.3195, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. & Calcaterra, J. (October, 2002). IBM internal remote testing hints and tips. IBM Technical Report # 29.3584, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. & Hunt J. (May, 2003). Lotus WordPro feature on-line survey. IBM Technical Report # 29.3647, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. & Krauss, F. S. H. (September, 2002). Physical Design Turn-Around-Time Web site utility usability assessment. IBM Technical Report # 29.3562, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. & Ortega, K. (June, 2003). ISIT Deployer V2.1 usability test results. IBM Technical Report # 29.3652, Internal Use Only. Research Triangle Park, NC: International Business Machine.

Vigilante, W. J., Jr. & Priestley M. (March, 2003). Output formatting of DITA related links: Web survey results. IBM Technical Report # 29.3626, Internal Use Only. Research Triangle Park, NC: International Business Machine.

PUBLISHED PATENTS

- Insertion of Null Packets to Mitigate the Effects of Interference in Wireless Communications
  - Lyle, R.D., Lynch, J.P., Udoh, U.E., & Vigilante W.
  - US Patent No. US 7,920,618 B2. Date: April 2011
- Apparatus and Method Employing Dynamic Hop Sequence Adjustment in FHSS Networks.
  - Lyle, R. D., Lynch, J. P., Quinn, M., & Vigilante, W. J., Jr.
  - US Patent No. 7,269,199. Date: September 11, 2007
- Apparatus, System, and Method for Mitigating Access Point Data Rate Degradation Lyle, R. D.,
  - Lynch, J. P., Reed, S. W., & Vigilante, W. J., Jr.
  - US Patent No. US 7,039,417. Date: May 2, 2006
- Portable Computer System with Hand-Warming.
  - Lyle, R. D., Lynch, J. P., Quinn, M. & Vigilante, W. J., Jr.
  - US Patent # US 6,878,902. Date: April 12, 2005
- Apparatus and system for vertically storing computing devices.
  - McClain, B.R., Nay, D.T., & Vigilante, W. J., Jr.
  - US Patent No. 7,527,155. Date: February 11, 2004
- Network Controller Having Dynamic Hop Sequence Adjustment in FHSS.
  - Lyle, R. D., Lynch, J. P., Quinn, M., & Vigilante, W. J., Jr.
  - Publication No. US 2005/0047481 A1. Date: March 3, 2005
- Authorization of Payment for a Commercial transaction VIA a Bluetooth Enabled Device.
  - Abell, J., Lynch, J. P., Oxrieder, C. B., Usen U., & Vigilante, W. J., Jr.
  - Pub. No.: US 2003/0172028 A1. Date: September 11, 2003

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