Vita

Mark D. Lee, Ph.D.
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Citizenship: United States of America

Professional Experience

2022 – Present	**Head of Research, Analytics, and Business Development** *UL Solutions ComplianceWire and UL Course Create* Developing Best Practice guidance for Life Sciences Industry Quality and Learning professionals using data and analytics. Lead the annual UL ComplianceWire Knowledge Summit conference. Manage industry partnerships to grow revenue.
2014 – Present	**Adjunct Professor and Research Faculty** *NYU Tandon School of Engineering – People Analytics* Teaching Graduate Courses in Statistics, Human Capital Analytics, Human Factors, HRIS Systems, and Workplace Design. Research on bias in AI algorithms.
2020 – 2022	**Principal, Acorn AI** *Medidata, a Dassault Systems Company* Acorn AI helps companies bring new medicines & medical devices to market, with better data, better data science, and artificial intelligence. Led prospecting, and sales for Synthetic Control arms, Intelligent Trials, Medidata Link, Imaging, and Remote Source Review technologies and services. Achieved 154% of quota.
2019 - 2020	**Executive Vice President** *iThreat* ◊ iThreat provides Threat Intelligence Programs to help major corporations protect their people, assets, and brands. Provided thought leadership on use of AI, developed Sales and Marketing infrastructure.
2018 - 2019	**Global Director of Software Business Development** *Certara* ◊ Head of software and solutions for Certara's Pharmacometric and Drug Discovery and Visualization solutions. Lead a team responsible for more than $30 million annually.
2013 - 2017	**Director of Business Development** *Certara* ◊ Responsible for driving sales of Model Informed Drug Development Consulting services, Software, and Regulatory Writing Services.

2007 - 2013	**Vice President, Sales** *Underwriters Laboratories (UL) EduNeering* ◊ Lead 17-member global sales team to drive revenue of over $28 million annually.

Account Director
UL EduNeering (Was Kaplan EduNeering, Inc.)
◊ Leading sales efforts for Cloud-Based knowledge management solutions in the Pharmaceutical and Medical Device Compliance and regulatory training area. Responsible for driving revenue and profitability from a $6 million dollar book of business. Lead project teams to ensure successful client engagements.

	Director, EduMap Solutions
2005 – 2007	*Kaplan EduNeering, Inc.* ◊ Equity holder in EduNeering startup. Responsible for R&D, Execution, and Business Development for a propriety knowledge management consulting service. Led the assessment of manufacturing interventions in a large global pharmaceutical company. Conducted Business Development Surveys. Analyzed tasks for new system features and designed UX for next generation implementation.

2004 – 2005	**Sr. Usability Engineer** *Siemens Corporate Research Inc.* ◊ Responsible for leading and conducting research in the areas of Human Computer Interaction, user-centered design, and related fields. At Siemens Corporate Research Inc. I proactively participated in the project acquisition process with Siemens operating companies, and for research projects with the government and universities. Lead a global UX team for developing next generation building management systems.

2000 – 2004	**Manager of Human Factors** *Pitney Bowes, Shelton, CT* ◊ Managed ten Human Factors Engineers and six Graphic Designers to deliver world-class user experiences for mail creation and finishing products. Responsible for project direction, budgets and schedule, technology research, process/metric improvement, team performance objectives, appraisals and professional development.

1998 – 2000	**Assistant Professor of Psychology** *Old Dominion University, Norfolk, VA* ◊ Member of the Industrial/Organizational Psychology faculty, specializing in Human Factors. Responsible for teaching, student supervision, and development of funded research.

1994 - 1998	**Human Factors Consultant Engineer**
	NCR Retail Systems Group, *Atlanta, GA*

◊ Consulting UX specialist and project manager for retail solution development. Lead designer for the next generation Point of Sale (POS) system for US Postal Service. Conducted research for next generation systems.

Senior Human Factors Engineer
TransQuest Information Solutions, Atlanta, GA (A Delta Airlines/NCR Joint Venture)
Lead human factors engineer for flight operations, in-flight, and personnel systems

Cognitive Engineering Consultant
NCR, Human Interface Technology Center (HITC), Atlanta GA

◊ Responsibilities included design and development of graphical user interfaces. Marketed design services by identifying targets both internal and external, generating marketing collateral, multimedia presentations, writing proposals, and closing sales for design services.

1991 - 1994	**Human Factors Scientist**
	Lockheed Aeronautical Systems Co., Marietta, GA.

◊ Conducted Internal Research and Development (IRAD) projects in virtual auditory displays for future application to the F-22. Provided design support for Lockheed's entrant into the Air Force/Navy Joint Primary Aircraft Training System (JPATS) competition. Secret security clearance (not current).

1988 - 1993	**Graduate Research Assistant/Lab Coordinator**
	Human Attention and Performance Laboratory (HAPL), Georgia Institute of Technology, Atlanta, GA.

◊ Conducted experiments funded by the Air Force and NIH to determine training needed for high performance cognitive skills. In addition to the training research conducted studies of cognitive aging.

1990 - 1994	**Statistical Consultant - Faculty Professional Development**
	Clayton State College, Morrow, GA

◊ Conducted studies with English and Mathematics departments to develop more reliable and valid measures for first year students and to promote standard measures across faculty members.

1987 - 1988	**Supervisor**
	AT&T Network Operations Group, Systems Evaluation Center, Piscataway, NJ

◊ Conducted research in three areas of human and computer interaction: CRT readability, user interface consistency, and system usability. Managed the Human Factors Library and developed an on-line library catalog.

1987 **Technical Writer -** *AT&T Customer Services Division, Piscataway, NJ*
◊ Edited on-line and paper documentation for a maintenance information system. Designed and produced job-aids for system end users.

Earned Degrees

Ph.D. Engineering Psychology, 1996 - *The Georgia Institute of Technology, Atlanta Georgia.*
Minor Area: Industrial and Systems Engineering
  Dissertation - *Multi-channel auditory search: Toward understanding control processes in polychotic auditory listening.* Advisor: Dr. Arthur D. Fisk. (winner, APA Division 21 George E. Briggs Dissertation Award)
M.S. Engineering Psychology, *1991 - The Georgia Institute of Technology, Atlanta, Georgia.*
  Thesis - *The effects of inconsistency on the maintenance of skill level in a semantic category search task.* Advisor: Dr. Arthur D. Fisk. (winner, Sigma XI Thesis Award)
B.A. Psychology, *January, 1988 - Montclair State University, Upper Montclair, New Jersey.*

Other Graduate Work

Pharmacometrics, 2017 University of Maryland (1 year of graduate work in the M.S. program)

Publications (*Denotes refereed or reviewed)

Lee, M. D., Wiklund, M. E. (2023) ComplianceWire® 2023: Compliance Learning Benchmarking Study [White paper]. UL Solutions. https://collateral-library-production.s3.amazonaws.com/uploads/asset_file/attachment/55979/ComplianceWire_Benchmark_Study_Whitepapers_2023.pdf
*Lee, M. D. (2023). Is Read and Understand Training Read and Understood? *HFES 12th International Symposium on Human Factors and Ergonomics in Healthcare*. Santa Monica, CA: Human Factors Society
Lee, M. D. (2015). Confessions of a non-designer designer. DMI Review, 26,(2), 16-19.
Lee, M. D. (2015). Human Factors: The diffusion of a profession. DMI Review, 26,(1), 49-53.

*** Lee, M. D., Sims, R. (2014). UL EduNeering and the FDA Cooperative Research and Development Agreement: an Example of a Successful Government/Industry Collaboration. *HFES 2014 International Symposium on Human Factors and Ergonomics in Health Care: Leading the Way*. Santa Monica, CA: Human Factors Society.
*Mamykina, L., Lee, M. D., Harrison, C. (2005). Comparing Relational and Metaphorical Approaches to Information Visualization. *Proceedings of the Human Factors and Ergonomics Society's 49th Annual Meeting* (pp. 195-199). Santa Monica, CA: Human Factors Society.

*Junius Gunaratne, J., Goose, S., and Lee, M. D., (2005). Nomadic Nurse: Toward Optimizing Home Healthcare with Voice Interaction, 11th International Conference on Human-Computer Interaction, Las Vegas Nevada, USA, Erlbaum.

*D'Souza, M. E., Lund, A., Batra, S., Beith, B., Lee, M. D., Orr, L., & Salzman, M., (2003). To Be or Not to Be: Manager or Individual Contributor? *Proceedings of the Human Factors and Ergonomics Society's 47th Annual Meeting* (pp. 985-989). Santa Monica, CA: Human Factors Society.

*Coyne, J. and Lee, M. D. (2002). The Effects of Visual Cues and Interstimulus Interval on Accuracy in Auditory Localization and Detection. *Proceedings of the Human Factors and Ergonomics Society's 46th Annual Meeting* (pp. 1613-1617). Santa Monica, CA: Human Factors Society.

*Capobianco, G. and Lee, M. D. (2001). The role of weather in general aviation accidents: An analysis of causes, contributing factors, and issues. *Proceedings of the Human Factors and Ergonomics Society's 45th Annual Meeting* (pp. 190-194). Santa Monica, CA: Human Factors Society.

*Coyne, J., Lee, M. D. and Cunningham, A. N. (2001). The effects of speaker gender, frequency, and distinctiveness on auditory search performance. *Proceedings of the Human Factors and Ergonomics Society's 45th Annual Meeting* (pp. 1358-1361). Santa Monica, CA: Human Factors Society.

*Lee, M. D. (2001). Multi-channel auditory search: Toward understanding control processes in polychotic auditory listening. *Human Factors, 43,(2),* 328-342.

Coyne, J. and Lee, M. D. (2000). Errors in multi-channel auditory search: Localization vs. Detection. In D. B. Kaber and M. R. Endsley (Eds.). Proceedings of the Human Performance Situation Awareness and Automation Conference (pp. 184-189). Mississippi State, MS: Mississippi State University

*Capobianco, G., Lee, M. D., and Cohen, S. (2000). Using multiple specialized keyboards on touch screen displays: Is switching keyboards distracting to novice users? *Proceedings of the Human Factors and Ergonomics Society's 44th Annual Meeting, Vol 1,* (pp. 334-337). Santa Monica, CA: Human Factors Society.

*Lee, M. D., Capobianco, G., and Cohen, S. (2000). Choosing between a Backspace and/or a Clear key for error correction by inexperienced users on touch screen keyboards. *Proceedings of the Human Factors and Ergonomics Society's 44th Annual Meeting, Vol 1,* (p. 363). Santa Monica, CA: Human Factors Society.

Capobianco, G., Lee, M. D. (2000). Relationship between auditory localization performance and measures of spatial ability. Proceedings of the Virginia Space Grant Consortium 2000 Student Conference, (pp. 35-39). Hampton, VA, Virginia Space Grant Consortium

*Lee, M. D. and Isreal, J. B. (1999). Dynakey Screen Generator: An active design document and prototyping tool. *Proceedings of the Human Factors and Ergonomics Society's 43rd Annual Meeting,* (p. 943). Santa Monica, CA: Human Factors Society.

*Capobianco, G., Lee, M. D., Cohen, S. (1999). Alphabetic vs. QWERTY keyboard layouts for touch screens: Hasn't someone already done that? *Proceedings of the Human Factors and Ergonomics Society's 43rd Annual Meeting*. (pp. 452-456) Santa Monica, CA: Human Factors Society.

*Lee, M. D. (1997). Multi-channel auditory search: Toward understanding control processes in polychotic auditory listening. *Proceedings of the Human Factors and Ergonomics Society's 41st Annual Meeting*. (pp. 1343-1347) Santa Monica, CA: Human Factors Society.

Lee, M. D. (1995). On the use of virtual audio displays: Performance as a function of the number of auditory sources. *Proceedings of the 1995 AT&T Behavioral Sciences Symposium.* (pp. 266-269) March, 1995. AT&T.

*Fisk, A. D., Cooper, B. P., Hertzog, C., Anderson-Garlach, M. M., and Lee, M. D. (1995). Understanding performance and learning in consistent memory search: An age-related perspective. *Psychology and Aging, 10,* 255-268.

*Rogers, W. A., Lee, M. D., & Fisk, A. D. (1995). Contextual change and skill acquisition in visual search. *Human Factors, 37,* 158-172.

Lee, M. D., and Patterson, R. W. (1994). The application of three-dimensional audio displays to aircraft cockpits: User requirements, technology assessment, and operational recommendations. *Proceedings of Beyond Speech/Virtual Reality/Teleoperation 1993*. SIG-Advanced Applications

*Fisk, A. D., Hertzog, C., Lee, M. D., Rogers, W. A., and Anderson, M. M. (1994). Long-term retention of skilled visual search: Do young adults retain more than old adults? *Psychology and Aging, 9,* 206-215.

*Lee, M. D., & Fisk (1993). The effects of inconsistency on the maintenance of skill level in a semantic category search task. *Human Factors, 35*, 205-220.

Lee, M. D., Fisk, A. D., Anderson, M. M. and Hertzog, C. (1993). The retention of skill in semantic category visual search tasks: a comparison of older and younger adults. *Proceedings of the Mid-Atlantic Human Factors Conference*. (pp. 23-29) Norfolk VA; Tidewater Chapter of Human Factors Society.

Lee, M. D., Patterson, R. W., Folds, D. J., and Dotson, D. A. (1993). Application of simulated three-dimensional audio displays to fighter cockpits: A user survey. *Proceedings of NAECON*, (pp. 654-660) May 1993. IEEE.

Lee, M. D. (1992). Degree of task consistency and maintenance of skill level in semantic category visual search. Proceedings of the Human Factors Society's 36th Annual Meeting*, (pp. 1311-1315). Santa Monica, CA: Human Factors Society.

*Cooper, B. P., Lee, M. D., Goska, R. E., Anderson, M. M., Gay, P. E., Fickes, L. A. & Fisk, A. D. (1992). Age related effects in consistent memory search: Performance is the same, but what about learning? *Proceedings of the Human Factors Society's 36th Annual Meeting*, (pp. 146-150). Santa Monica, CA: Human Factors Society.

*Fisk, A. D., Lee, M. D., & Rogers, W. A. (1991). Recombination of automatic processing components: The effects of transfer, reversal, and conflict situations. *Human Factors*, *33*, 267-280.

*Lee, M. D., Rogers, W. A., & Fisk, A. D. (1991). Contextual change and skill acquisition in visual search: Does the rate of change affect performance? *Proceedings of the Human Factors Society's 35th Annual Meeting*, (pp. 1377-1381) Santa Monica, CA: Human Factors Society.

*Lee, M. D., Fisk, A. D., & Rogers, W. A. (1989). Transfer of automatic component processes to compatible, incompatible, and conflict situations: Issues for retraining. *Proceedings*

of the Human Factors Society 33rd Annual Meeting, (pp. 1243-1247). Santa Monica, CA: Human Factors Society.

Technical Reports

Zikria, H. and Lee, M. D. (2023). Why life science companies change learning management systems. UL Solutions, Princeton NJ.

Lee, M.D., and Capobianco, G. (2000). AWIN general aviation simulator baseline test report. For NASA, ASEE summer faculty fellowship program. Langley, VA

Lee, M. D., & Capobianco, G. (1999). Investigating touch screen keyboard issues for Retail Self-Service Terminal (RSST). AAPL-TR-99-01. Old Dominion University, Norfolk, VA

Lee, M. D., & Capobianco, G. (1999). Filling out forms on touch screens: A literature review and guidelines. AAPL-TR-99-02. Old Dominion University, Norfolk, VA

Lee, M. D. and Burgess D. (1993). *The perception of location using simulated auditory localization cues: Accuracy and the effects of stimulus bandwidth*. GIT-GVU-93-32, Georgia Institute of Technology, Atlanta, GA

Fisk, A. D., Hodge, K. A., Rogers, W. A., Lee, M. D., Hertzog, C. K., & Corso G. M. (1991). *Automatic information processing and high-performance skills: Individual differences and mechanisms of performance improvement in search-detection and complex tasks*. AFHRL-TR-91-XX, Brooks Air Force Base, Texas: AFHRL/SCV.

Fisk, A. D., Rogers, W. A., Lee, M. D., Hodge, K. A., & Whaley, C. J. (1990). *Automatic information processing and high-performance skills: 2. Principles of consistency, part-task training, context, and complex task performance*. AFHRL-TR-90-84, Brooks Air Force Base, Texas: AFHRL/SCV.

Fisk, A. D., Hodge, K. A., Lee, M. D., & Rogers, W. A. (1989). *Automatic information processing and high-performance skills: Acquisition, transfer, and retention*. AFHRL-TR-89-69, Brooks Air Force Base, Texas: AFHRL/SCV.

Conference presentations

Lee, M. D., & Huang, S. (March 31, 2025). Onboarding in the Life Sciences Industry: How Much Training is Too Much? Presented at the HFES Health Care Symposium, Toronto, CA.

Lee, M. D. (2024). ComplianceWire® Annual Life Science Benchmarking Survey Results. Presented at the Leaders in Life Science Learning Series, UL Solutions, September 2024, Concord MA.

Lee, M. D. (2024). What can 684+ million completions tell us about GxP Training? Presented at the 21st Annual ComplianceWire Knowledge Summit, UL Solutions, April 2024, Weehawken, NJ.

Lee, M. D. (2023). Using AI for GxP training. Presented at the Leaders in Life Science Learning Series, UL Solutions, November 2023, Princeton NJ.

Lee, M. D. (2023). ComplianceWire® Annual Life Science Benchmarking Survey Results. Presented at the Leaders in Life Science Learning Series, UL Solutions, November 2023, Princeton NJ.

Lee, M. D. (2023). Pharma 4.0 system architectures and System Integration for better learning effectiveness and reduction of risk. Presented at the Leaders in Life Science Learning Series, UL Solutions, November 2023 Princeton NJ.

Lee, M. D. (2023). Is Read and Understand Training Read and Understood? Presented at the 12th International Symposium on Human Factors and Ergonomics in Healthcare, March 2023, Orlando, FL.

Lee, M. D. (2023). Key takeaways, the Zeitgeist, and how to change the world. Presented at the 20th Annual ComplianceWire Knowledge Summit, UL Solutions, Princeton NJ

Lee, M. D. (2022). Using big data to identify best practices in GxP training and compliance. Presented at the Association for GxP Excellence Annual Meeting, May 2022, San Antonio, TX.

Lee, M. D. (2020). Signal Detection Theory: Understanding Bias. Presented at GSX+ The Global Security Exchange sponsored by ASIS International, September 2020 (online conference).

Lee, M. D. (2016). The Trials and Tribulations of Pediatric Clinical Trials (Interactive Panel). 12th Pediatric Clinical Trials Conference, June 2016, Philadelphia, PA.

Lee, M. D., Sims, R. (2014). UL EduNeering and the FDA Cooperative Research and Development Agreement: An Example of a Successful Government/Industry Collaboration. Presented at the Human Factors and Ergonomics Society International Symposium on Human Factors and Ergonomics in Health Care: Leading the Way, April 2014, Baltimore, MD.

Mamykina, L., Lee, M. D., Harrison, C. (2005). *Comparing Relational and Metaphorical Approaches to Information Visualization.* Presented at the Human Factors and Ergonomics Society's 49th Annual Meeting, September 2005, Orlando, FL.

Coyne, J. and Lee, M. D. *The Effects of Visual Cues and Interstimulus Interval on Accuracy in Auditory Localization and Detection.* Presented at the Human Factors and Ergonomics Society's 46th Annual Meeting, October, 2002, Baltimore, MD

Coyne, J., Lee, M. D. and Cunningham, A. N. (2001). *The effects of speaker gender, frequency, and distinctiveness on auditory search performance.* Presented at the Human Factors and Ergonomics Society's 45th Annual Meeting, October 2001, Minneapolis, MN

Coyne, J.T. and Lee, M.D. *Errors in Multi-Channel Auditory Search: Localization versus Detection.* 78th Annual Meeting of the Virginia Academy of Science, May, 2000, Radford, VA.

Cunningham, A. N. and Lee, M. D. *Influence of speaker gender on target detection in auditory search.* 78th Annual Meeting of the Virginia Academy of Science, May, 2000, Radford, VA.

Lee, M. D., Capobianco, G., and Patilkulkarni, S. *The Effects of Age and Consistency on Performance in Auditory Search*. Poster session presented at the Cognitive Aging Conference, April, 2000, Atlanta, GA.

Capobianco, G., Lee, M. D. Relationship between auditory localization performance and measures of spatial ability. Presented at the Second Virginia Space Grant Consortium Conference, March, 2000, Hampton, VA,

Capobianco, G., Lee, M. D., Cohen, S. Alphabetic vs. QWERTY keyboard layouts for touch screens: Hasn't someone already done that? Presented at the *Annual Meeting of the Human Factors and Ergonomics Society*, September, 1999, Houston, TX.

Lee, M. D. and Isreal, J. B. Dynakey Screen Generator: An active design document and prototyping tool. Presented at the *Annual Meeting of the Human Factors and Ergonomics Society*, September, 1999, Houston, TX.

Lee, M. D. *Multi-channel auditory search: Toward understanding control processes in polychotic auditory listening.* Presented at the *Annual Meeting of the Human Factors Society,* September 1997, Albuquerque New Mexico.

Lee, M. D. *Toward an understanding of control processes in polychotic detection.* Presented at the *Annual Meeting of the American Psychological Association*, August, 1996, Toronto, Canada.

Lee, M. D. On the use of virtual audio displays: Performance as a function of the number of auditory sources. *Proceedings of the 1995 AT&T Behavioral Sciences Symposium.* March, 1995, Holmdel, New Jersey.

Meyer, A. E., and Lee, M. D. (1995). Intelligent training for combustible gas indicator users. *Proceedings of the 1995 AT&T Behavioral Sciences Symposium.* March, 1995, Holmdel, New Jersey.

Lee, M. D. and Burgess D. *The application of simulated auditory localization cues to aircraft cockpits: Accuracy and the effects of stimulus bandwidth.* Presented at the Annual Meeting of the Human Factors Society. October, 1993, Seattle, WA.

Lee, M. D., and Patterson, R. W. The application of three-dimensional audio displays to aircraft cockpits: User requirements, technology assessment, and operational recommendations. *Proceedings of Beyond Speech/Virtual Reality/Teleoperation 1993*. SIG-Advanced Applications, New York, NY, November 1993.

Lee, M. D., Patterson, R. W., Folds, D. J., and Dotson, D. A. Application of simulated three-dimensional audio displays to fighter cockpits: A user survey. Presented at *NAECON*, Dayton, OH, May 1993.

Lee, M. D., Fisk, A. D., Anderson, M. M. and Hertzog, C. The retention of skill in semantic category visual search tasks: a comparison of older and younger adults. Presented at the *First Annual Mid-Atlantic Human Factors Conference*, February, 1993.

Lee, M. D. Degree of task consistency and maintenance of skill level in semantic category visual search. Presented at the *Human Factors Society 36th Annual Meeting*, Atlanta, GA 1992

Cooper, B. P., Lee, M. D., Goska, R. E., Anderson, M. M., Gay, P. E., Fickes, L. A. & Fisk, A. D. Age related effects in consistent memory search: Performance is the same, but what about learning? Presented at the *Human Factors Society's 36th Annual Meeting*, Atlanta, GA 1992

Anderson, M. M., Lee, M. D., Fisk, A. D., & C. K. Hertzog. (Long-term Retention of Skilled Visual Search for Young and Old Adults. Presented at the *Human Factors Society's 36th Annual Meeting*. Atlanta, GA 1992.

Lee, M. D., & Fisk, A. D. The effects of degree of task inconsistency on maintenance of automaticity in visual search. Presented at the *Southern Society for Philosophy and Psychology 84th Annual Meeting*, Memphis, TN April, 1992.

Hodge, K. A., Lee, M. D., & Fisk, A. D. A comparison of part and whole task training procedures in a simulated dispatching task. Presented at the *Southern Society for Philosophy and Psychology 84th Annual Meeting*, Memphis, TN April, 1992.

Lee, M. D., Rogers, W. A., & Fisk, A. D. Contextual change and skill acquisition in visual search: Does the rate of change affect performance? Presented at the *Human Factors Society's 35th Annual Meeting*, San Francisco, CA September, 1991.

Lee, M. D., Rogers, W. A., & Fisk, A. D. Rate of contextual change affects different mechanisms in visual search. Presented at the Southern Society for Philosophy and Psychology 83rd Annual Meeting, Atlanta, GA March, 1991.

Rogers, W. A., Lee, M. D., & Fisk, A. D. Skill acquisition in visual search: The effects of practice on performance and learning. Presented at the *Annual Meeting of the American Psychological Association*, Boston, MA August, 1990.

Lee, M. D., Rogers, W. A., & Fisk, A. D. Performance improvement and transfer of training as a function of consistency and amount of practice. Presented at the Southern Society for Philosophy and Psychology 82nd Annual Meeting, Louisville, KY April, 1990.

Lee, M. D., Fisk, A. D., & Rogers, W. A. Transfer of automatic component processes to compatible, incompatible, and conflict situations: Issues for retraining. Presented at the *Human Factors Society 33rd Annual Meeting*, Anaheim, CA October, 1989.

Invited Presentations

Lee, M. D. (2019, December). Signal Detection and ROC analysis with R. Presented to the Trenton R Users Group. West Windsor, NJ.

Lee, M. D. (2015, November). Drug label optimization using biosimulation. Presented at the meeting of the San Diego Regulatory Affairs Network, San Diego, CA.

Lee, M. D. (1998, August). *Virtual audio displays in aircraft cockpits, and can we use them? User requirements, technology assessment, and experiments with polychotic auditory listening.* George E. Briggs Dissertation Award. Presented at the Annual Meeting of the American Psychological Association, San Francisco, CA.

Patents

Stemmle, D. J., Ferracani, P., Lee, M. D., (2003). Paper handling system feeder adjustment for stack elevator, Pitney Bowes, Inc., Patent 7,540,494 (filed in US, Canada, China, EU, India 2006)

Kaye, S., Doutney, J., Hallgren, R., Kroczaleski, B., Lee, M. D., (2002). Permit Creation in a mailing machine. Pitney Bowes, Inc., Patent Number US 10/639,380.

Isreal, J. B., & Lee, M. D. (2001). Graphical user interface (GUI) prototyping and specification tool. NCR Corporation, Patent Number 6,330,007.

Grants and Contracts Awarded

Lee, M. D. Principal Investigator, and Gary Capobianco (2000). Analysis of aviation weather accidents, $22,000.00 NASA

Lee, M. D. Principal Investigator, and Joseph Coyne (2000). The Effects of Aviation Weather Information Systems on General Aviation Pilots' Workload, $22,000.00 NASA

Lee, M. D. Principal Investigator (1999). The Effects of Age and Consistency on Performance in Auditory Search, Old Dominion University, Summer Research Fellowship, 6/30/99 to 9/30/99, $6000.00.

Lee, M. D., Principal Investigator, (1999). Filling Out Forms on Touch Screens: A Proposal for a Literature Review and the Development of Guidelines. NCR Corporation, $10, 243.00.

Lee, M. D. Principal Investigator (1998). Investigating Touch Screen Keyboard Issues for a Retail Self-Service Terminal, NCR Corporation, 11/4/98 to 3/15/98, $23,780.00

Grants Submitted

Togelius, J., Squires, P. and Kaufman, H. G. (2020). Detecting Bias in Job Ads via Machine Learning. Submitted to Amazon, Mark Lee as consultant.

Kaufman, H. G., Lee, M. D., and Squires, P. (2019). Preventing AI from introducing Bias in Hiring Decisions. Submitted to the Ford Foundation, not funded

Biswal, B. B., Kannurpatti, S., Rypma, B. and Lee, M. D. (2004). Real-time functional magnetic resonance imaging (fMRI). Submitted to NIH, not funded.

Lee, M. D. Principal Investigator, and Harlow, J. Y. (2000). Community Response to Noise in Relation to the SATS Initiative. Submitted to NASA, $69,582.00, not funded.

Lee, M. D. Principal Investigator, Porter, B. E., and Sanchez, J (2000). An empirical investigation of traffic stops and racial profiling. Submitted to the Virginia Department of Motor Vehicles, $11,227.00, not funded.

Lee, M. D. Principal Investigator, Sanchez, J, and Porter, B. E., (2000). An empirical investigation of traffic stops and racial profiling. Submitted to the Allstate Foundation, $25,500.00, not funded.

Lee, M. D. Principal Investigator, & Scerbo, M. W. Co-Investigator (1999). Age-related changes in auditory/visual search. Submitted to the National Institute on Aging, $65,136.00, not funded.

Lee, M. D., Principal Investigator, Zahorian, S. A. & DVP Corporation (1999). Training Spatial Audio Systems to Individually Adapt Head Related Transfer Functions (HRTFs). Submitted to the Navy STTR Program, $100,000.00, not funded.

Lee, M.D. Principal Investigator, Dickinson, T., Major, D. & Scerbo, M. W. Co-Investigators (1999). Investigating collaboration and group decision making in operational command centers. Submitted to Navy with VMASC, $20,000.00, not funded

Consulting Activities

Lee, M. D., Consultant (2022). Pharmacometrics consulting and software market.

Lee, M. D., Consultant (1999). Human Factors Engineering forensic consultant regarding injuries from falls. 5/3/1999 through 6/15/99.

Software Competencies

Statistical
SAS, SPSS, R, Phoenix WinNonlin

Productivity
Google Suite, MS Office suite

Development
Competence with end-user tools and some scripting, light on programming. Experience with Dreamweaver, Axure, FrontPage, Visual Basic.net, JavaScript
User of Windows, Mac, iPhone, and UNIX platforms

Academic Awards

- American Society for Engineering Education Fellowship - NASA, Summer 2000
- American Psychological Association George E. Briggs Dissertation Award, August 1997
- Human Factors Society Alphonse Chapanis Award for the best student paper, October, 1992
- Georgia Tech Sigma Xi Thesis award, May, 1992
- Best Student Paper Award from the Training Technical Group of the Human Factors Society, September 1991
- Best Student Paper Award from the Training Technical Group of the Human Factors Society, October 1989

Design Awards

- (2006).   Klein C., Mastriano A., Rountree D., Russo, S., Hayes, V., Lee, M., Bilson, C., Pitney Bowes Inc., Shelton, CT, United States of America, **International Forum (IF) Design Award**, Hanover Fair, Hanover Germany

Teaching History

Graduate Course, *Statistics for Data Analysts*, NYU Tandon, Fall 2023, Fall 2022
Graduate course, *Human Capital, Big Data, Predictive Analytics, & ROI*, at NYU Tandon, Spring 2023, Spring 2022
Graduate course, *Job and Workplace Design*, at NYU Tandon, Fall 2016, Fall 2015, Spring 2014
Graduate course, *Human Factors in Design*, at NYU Tandon, Spring 2017, Spring 2016, Spring 2015
Graduate course, *Management of Human Resource Information Systems*, at NYU Tandon, Summer 2023, Summer 2022, Summer 2021, Summer 2014
Graduate course *Perception*, at Old Dominion University, Fall 1999, Summer 1999, Spring 1999, Fall 1998, Spring 2000, Fall 2000
Graduate course Human Factors (Fall 1999) at Old Dominion University
Graduate seminar in Auditory Performance (Spring 2000) at Old Dominion University

Graduate course *Cognition and Learning* (24 students, Summer, 1997) at the Georgia School of Professional Psychology (a unit of the American Schools of Professional Psychology).
Guest lecturer in *Engineering Psychology* (Fall 1996) at the Georgia Institute of Technology. Lectured on career choices for Experimental Psychologists.
Guest lecturer in *Introductory Psychology* (Winter, 1992) at the Georgia Institute of Technology. Lectured on Visual Perception.
Participant in Teaching Practicum, (Spring, 1991) at the Georgia Institute of Technology. Lectured *Introductory Psychology* students on sub-cortical brain functions, and developmental psychology. My teaching ratings earned were 3.75 out of 4.0.
Small Group Facilitator - *Freshman Seminar,* (1985). At Montclair State University, I led a group dynamics course for college freshman.

Theses and Dissertations

Junius Gunaratne, 2017 - *Influencing Financial Decision-Making Through Human-Computer Interaction Design Interventions,* Doctoral Dissertation NYU Tandon, Committee Member
Joseph Coyne, 2001 - *The effects of visual cues and interstimulus interval on error rates in **auditory** localization and detection*, M.S. Thesis ODU, Committee Member

University and Departmental Service

1998- 2000 - Member Ph.D. Program Committee
1998 - 2000 - Member Committee for Accreditation, Human Factors Engineering Program
1999 - 2000 - Member Faculty Affairs committee

Community Service

- Treasurer, Newtown Rock Girls Softball
- BSA Troop 66 West Windsor NJ Scoutmaster
- BSA Troop 66 West Windsor NJ Eagle Advisor
- BSA Troop 66 West Windsor NJ Troop Committee Chair
- BSA Troop 66 West Windsor NJ Troop Committee Member
- BSA Troop 66 West Windsor NJ Troop Committee Treasurer
- Personal Fitness and Genealogy Merit Badge Counselor
- Helping Oxford Public Education (HOPE)- Organizational Liaison Chair, 2002
- Oxford Board of Education, 2002-2003
  - Chair Communications subcommittee
  - Chair Curriculum/Technology committee
  - Member, Oxford-Seymour Liaison committee
  - Member, Safe Schools committee

Professional Activities

- Ad Hoc Reviewer- Simulation in Health Care, 2011 to 2015
- Ad Hoc Reviewer - International Journal of Industrial Ergonomics - 2010
- Editorial Board Member, Human Factors Journal, 2006-2012
- Reviewer for Human Factors journal, 2005
- Member of National Program Committee for Human Factors and Ergonomics Society Annual Meeting, 2001 - 2008
- Chair of Special Sessions and Demonstrations for Human Factors and Ergonomics Society Annual Meeting, 2001 - 2003

- Member of the Alphonse Chapanis awards committee, Human Factors and Ergonomics Society, 2000 - 2004
- NASA Peer review Panelist, Advanced Human Support Technology, Space Human Factors Engineering, June 1999, June 2000, June 2002, August 2003.
- Treasurer, Human Factors and Ergonomics Society Tidewater chapter, 1998-2000
- Chair, Education and Training Committee, Human Factors and Ergonomics Society, 1998-2001
- Member, Education and Training Committee, Human Factors and Ergonomics Society, 2001- 2014
- Reviewer for Human Factors and Ergonomics Society Annual Meeting (1998, 1999, 2000, 2005, 2017)
- Reviewer for Association for Computing Machinery - Special Interest Group on Human Computer Interaction (ACM-SIGCHI 1998, 1999, 2000)
- NCR representative to the Center for Office Technology, Arlington VA, member of Science Committee, 1996-1998
- Member of the local organizing committee for the 1992 Human Factors Society Meeting, Atlanta, GA, and the 1987 meeting in New York City.
- Chair of the Placement Committee for the 1992 Human Factors Society Meeting, Atlanta, GA.

Professional Organizations

- Society for Human Resource Management (SHRM) – present
  - NYU Tech SHRM student chapter
- American Psychological Association, 1994-1998
- Division 21, Engineering Psychology, American Psychological Association, 1999-present
- Association for Computing Machinery - Special Interest Group on Human Computer Interaction, (ACM-SIGCHI) Member 1994-1995, 1997-1998, 2003-2007.
- Human Factors and Ergonomics Society. 1987-present
  - Sensory Performance Technical Group
  - Computer Systems Technical Group
  - Virtual Environments Technical Group

Continuing Education

2018
Sandler Sales Training
Great Demo Workshop

2016
Hands-on experience with Model-based drug development: Incorporating population variability into mechanistic prediction of PK and modeling PK-PD.
Using Phoenix WinNonlin
Synchro University – Regulatory Writing Curriculum
Biotech Primer – Drug Development Immersion

2015
Biotech Primer - Bio-basics
Introduction to Phoenix WinNonlin
Introduction to Population Modeling with Phoenix NLME
Miller Heiman Strategic Selling
Wilderness First Aid - Refresher

2014
Managing people, Underwriter's Laboratory

2012
Strategic Account Management – American Management Association
Wilderness First Aid
CPR/AED

2010
Project Management Professional (PMP) Credential

2009
Consultative Selling Skills – Consultative Resources Corporation
Project Management that Works

2008
Negotiating to Win – American Management Association

2007
Awarded Project Management Professional (PMP) Credential

2004
Model Based Requirements Engineering with UML, Taught by Brian Berenbach

2003
Communicating with Diplomacy, Skillpath, Mission KS.
Usability and Software Architecture, Len Bass and Bonnie John, ACM-SIGCHI conference
Usability in Organizations, Deborah Mayhew, ACM-SIGCHI conference

2002
LEAD!, leadership courses Leading the Business, Leading People, Leading Change
Edward Tufte seminar on Information Design
Modeling Approaches to Human Performance, Ron Laughery, Human Factors and Ergonomic
Society conference

2001
Project Management, Stanley E. Portney and Associates

1996
Object Oriented Analysis and Design, Learning Tree International