Dr. Rick (Richard M.) Hesse, D.Sc. Professor Emeritus, Decision Sciences, Pepperdine University 4531 Brittany Hills Way, Knoxville, TN 37938 Phone: (805) 258-6898 email: <u>rickhesse@aol.com</u>

EDUCATION: B.S., M.S., D.Sc., Engineering Science, Applied Math and Computer Science, McKelvey School of Engineering, Washington University in St. Louis. Doctoral Dissertation "A Heuristic Search Procedure for Estimating a Global Solution of Nonconvex Programming Problems," published in *Operations Research*, Vol. 21, No. 6, November-December 1973

TEACHING EXPERIENCE:

TEACHING WHILE SERVING AS PEPPERDINE PROFESSOR EMERITUS

- Jan 2020 Present; Union College (KY), Adjunct Professor of Business; Micro Econ 204 (2), MGMT 352 (1), Business Strategy 451 ONLINE (3)
- Jan 2016 May 2019: Lincoln Memorial University, Professor of Business Analytics.
 - **BS Program:** ECON 212-Micro (1), BUSN 260 Excel (2), BUSN 270 Business Statistics (2), ORLL 308 Computer Technology (1); ORLL 307 Basic Economics (1)
 - MBA Program: MBA 511 ONLINE Operations & Service Management w/Quantitative Analysis (5);
 - MSBA Program: MSBA 510 Statistics (1); MSBA 515 Forecasting & Regression (3); MSBA 517 Survey of Management Science (3)
 - **DBA Program**: DBA 711 **ONLINE** Organizational Design (1); DBA 801 Statistical Research (1)
- 2015: Pepperdine University, Seaver College, Professor of Decision Sciences full-time sophomores business statistics & forecasting (3) Spring, Summer 2015
- 2013-4: Cal Lutheran University: Professor of Business, Working MBA students business stats and forecasting (5), Management Science (1) 4 semesters
- 2013: Westmont College: Professor Of Business full-time juniors, business statistics (1) Spring 2013

FULL-TIME TEACHING

- August 1997 Jan 2013: Pepperdine University, Graziadio School of Business & Management, Professor Emeritus of Decision Sciences: full-time and working undergrads and MBAs business stats, forecasting, management science (linear programming, distribution models, decision theory, simulation, etc. using spreadsheets).
- 1989-1997: Mercer University, Industrial Engineering Department, Professor of Industrial Engineering full-time undergrads, working grads (MS program) statistics, reliability, management science, forecasting with spreadsheets. Directed MS theses and Senior Design Projects.
- **1987-1989: Georgia Tech, Management Department**, Visiting Professor of Management fulltime undergrads, doctoral students – management science (LP, Transportation, Assignment)

- **1983-1985:** Wake Forecast University: Graduate School of Business, Associate Professor of Quantitative Analysis MBA students Spreadsheets, management science, word processing
- 1981-1982: West Point (US Military Academy), Civil Engineering Department, Visiting Professor full-time undergrads Math of finance, management science, computer programming
- **1973-1981: San Diego State University**, School of Business, Professor of Quantitative Analysis full-time undergrads (juniors) management, statistics, management science and advanced management science.
- 1967-1973 University of Southern California, School of Business, Assistant Professor of Quantitative Analysis full-time undergrads and full-time MBAs calculus, statistics & MBA management science.
- 1965-1967 Washington University (St. Louis) School of Engineering, School of Business, Graduate Instructor full time BS engineering and business MBAs teaching them FORTRAN.

INTERNATIONAL PROGRAMS

• **Pepperdine One Week International Programs**: Led seven groups of 25 Pepperdine students on one-week International Business seminars: five (5) in Oxford, England, and two (2) in Shanghai, China and graded final report papers.

CONSULTING PROJECTS:

- ArgyleHaus Developed Excel template to quickly do cost analysis and estimates for producing clothing
- Standard Candy (GooGoo Clusters) Probability analysis of pre-orders for large retailer.
- Set up PERT/CPM chart for ITT-Rayonier in San Diego for a multi-million-\$ contract with ATT for transatlantic underwater cable to be produced and delivered on time. Coordinated with sales, marketing, production and engineering to successfully achieve on-time performance targets.
- Scheduled Mars Rovers surveillance crews so that their 24/7 schedules allowed for equal pay each week, instead of 36 hours one week and 48 the next for JPL, pro bono. The crew was ecstatic to get a regular paycheck and JPL accounting was happy that they didn't have to change their software.
- Developed a whole new algorithm to schedule Final Exams at West Point (USMA) that dramatically reduced the number of conflicts, wrote the computer code, and it ran in 10 minutes versus 2-3 weeks of several officers to find a solution which had more conflicts. Then it took just a few days to work out the 6-8 conflicts remaining versus 30-50 conflicts.
- While at Wake Forest, I developed "shortest cost" algorithm to minimize fueling costs for Piedmont Airlines (now US Airways) to work on their first PC so that a secretary could run it during lunch time once a month instead of two weeks of manual labor to determine stops for refueling.
- Directed MBA Pepperdine class project for Packaging company in the San Francisco Bay area, exploring options for extra energy needs (Bloom Technology, Wind, Solar, off-peak hours, generators, etc.) using Multi-attribute Analysis. Immediate acceptance and cost reduction of two options and further exploration of other options.
- Queuing study done by my Senior engineering class for "Junior's Grill" at Georgia Tech which led to a softer analysis of hours of operation, adding a few healthy choices, a cookie oven and soft-serve machine to double profits. Collecting queuing data was a nightmare!
- Developed over 30 Excel statistics templates (LUMAT1) that allow junior analysts to quickly and easily analyze data with results that any human being can read. Included descriptive statistics (box & whiskers, frequency, 6-sigma), discrete and continuous distribution templates, confidence intervals, 1- 2- and multiple-sample tests complete with charts and graphs. Over 1800 sold.

- Developed 20 Excel templates for forecasting (LUMAT2) using moving averages (a whole new way of dramatically reducing the forecasting error), linear regression (allowing minimization of either RMSE, MAD or MAPE) that are far superior to the built-in regression routines in Excel, and nonlinear regression (correctly analyzing the data instead of the logarithms of the data, which gives erroneous results and is used in the standard Excel add-in). Over 1800 sold.
- Skilled at leading and directing work teams and individuals finding creative solutions using Operations Research (OR), Management Science and statistics, having directed Senior Design projects, Masters projects and consulting projects.
- Other Consulting: KC Royals, RJ Software, Becker CPA Review Course consultant; Speaker: AMOCO Oil (Calgary, Canada), Coca-Cola (Atlanta) to International managers, Hughes International (LA), US Steel (Pittsburgh), RJ Reynolds (Orlando Disneyworld).

• MS Mercer Engineering Management Thesis and Senior Design advisor (a sample):

- Developed a quick, simple way to schedule the testing of large-scale generators reducing power requirements below a cut-off level, saving thousands of dollars per month in electrical bills.
- C-130 wing life extension at Warner-Robbins AFB, dramatically reducing the number of planes on the ground waiting for repair using job flow analysis (published "Center Wing Life Extension for the C-130," Journal for Production and Inventory Management, Third Quarter, Vol. 34, No. 3, pp. 36-38, 1993, with Marcontel, Grum.)
- Drivematic Riveting Machine optimization for riveting wings on C-17s and MD80s for Boeing, matching skills with workers for improved efficiency and thus cost/time reduction (Two-Way ANOVA)
- Taguchi design of experiments for jet engine blades at Pratt-Whitney
- *classified Army project (robotic ground troops)*
- classified Air Force project (JDAMs)
- Linear Integer Goal Programming blending model for a kaolin company near Macon, Georgia to balance several factors from different sources to greatly reduce blend time and optimize quality.

WORK EXPERIENCE:

FULL-TIME:

- **1985-87 Founder/Director of Georgia Tech Computer Institute** (2 years); 10 employees, numerous subcontractors. Negotiated deep price cuts for 8 rooms of PCs and printers with NEC, IBM, Epson, and others. My staff developed courses in Excel, Word, AutoCAD, general computing for business professionals to take during the day at GTCI.
- **1966-67: Sr. Analyst:** *McDonnell Automation Center*; large-scale linear programming (LP) models for various clients (US Department of Agriculture, Shell Oil, Anaconda Aluminum, CitGo), running MPS LP mainframe software, writing readable reports from the output using BEEF (Engineering Enriched FORTRAN), and presenting results to clients.
- **1964-65: Jr. Analyst:** *WUSL Biomedical Computer Lab*; developed programs for the new LINC computer (the first PC) with analog to digital conversion and computations about radiation treatment on patient tumors during treatments; wrote first educational training program on how to use LINC. Programmed the first medical PCs.
- Summer Jobs:

- **1964:** Sr. Analyst *Anheuser-Busch*; forecasting demand for beer sales by type of container, performing ANOVA design of experiments on marketing data with varying increase/decrease of ad budget.
- **1963:** Jr. Analyst *Douglas Missile Space Systems*; did numerical analysis calculations on disabling Russian satellite by exploding missile sending fragments into its path; calculated effect of chasing Russian MIG with thermonuclear warhead on US fighter plane; simulated global thermonuclear war with Russia using various strategies (hold back half!).
- **1962:** Jr. Analyst *IBM*; wrote first AUTOSPOTprogram for IBM's first NC machine (Hughes MT3) to manufacture parts for the IBM 1401, best-selling computer mainframe of all time.

RECENT PRESENTATIONS: (over 50 presentations overall)

- "Student Projects with Excel Routing Templates", 52nd National Conference Proceedings, Decision Sciences Institute, November 2021, Virtual Conference
- "Two Non-parametric Exercises," 52nd National Conference Proceedings, Decision Sciences Institute, November 2021, Virtual Conference
- "Adjusting Forecasts with Seasonal Data", 51st National Conference, Decision Sciences Institute, November 2020, Virtual Online Conference, **Best Learning and Education Research Paper Award**
- "ANOVA LP Real Example", with Dr. Joan Burtner, 51st National Conference, Decision Sciences Institute, November 2020, Virtual Online Conference
- "A new r² for Time Series Data," 49th National Conference, Decision Sciences Institute, November 2018, Chicago, IL.
- "Exponential Schmoosing", 49th National Conference, Decision Sciences Institute, November 2018, Chicago, IL.
- "Using Excel for Undergraduate Statistics," 48th National Conference, Decision Sciences Institute, November 2017, Washington, D.C.
- DiLellio, J (Presenter), Stanley, D. (Author), Hesse, R (Author), "Risks and Opportunities of Inverse ETFs for Long Term Investors," Applied Finance Conference. July 2014.

PUBLICATIONS – BOOKS AND CHAPTERS

Textbooks Authored by R. Hesse (co-authors noted):

- Hesse, R, <u>LUMAT: Learning to Use Managerial Analysis Templates</u>, Blue Pond Publishing, (AKA Azel Publishing) 1998-2021 (revised 3 times a year), based on <u>Managerial Spreadsheet</u> <u>Modeling and Analysis</u>, Richard D. Irwin, 1997. Electronic Text (Word, Excel templates, PP Slides and PDF files). *LUMAT* (*Learning to Use Managerial Analysis Templates*) has been successfully employed by over 1,600 Pepperdine MBAs students as well as 200 or more students from other universities.
- Hesse, <u>Managerial Spreadsheet Modeling and Analysis</u>, Irwin, 1997 (merged w/McGraw-Hill).
- Hesse & Woolsey, <u>Applied Management Science: A Quick & Dirty Approach</u>, SRA, 1980.
- <u>The Art of Decision Making</u>, <u>Applications Pack and Video Guide</u>, Rick Hesse for textbook by Kamlesh Mathur; Daniel Solow, Prentice-Hall, 1994
- <u>The Art of Modeling, Applications Pack for Management Science</u>, **Chapter** by Hesse for textbook by Mathur & Solow, Prentice Hall, 1993.

- <u>Introductory Management Science</u>, <u>Applications Pack</u>, 4th edition, Hesse for textbook by Eppen, Gould, and Schmidt, 1992.
- <u>Introductory Management Science, Annotated Instructor's Edition</u>, 4th edition, Hesse for textbook by Eppen, Gould, and Schmidt, 1992.
- "Management Science" and "Production and Operations Management," by R. Hesse **chapters** in <u>Management</u>, Stoner and Freeman, Prentice Hall, 1991.
- <u>Introductory Management Science</u>, <u>Applications Pack</u>, 3rd edition, Hesse for textbook by Eppen, Gould, and Schmidt, Prentice Hall, 1990.
- Hesse MacMAS, Managerial Action Skills for the Macintosh, 1988.
- Managerial Computing, MAS software and etextbook for LOMA, (ISBN 0-915322-95-1), 1987.

Quarterly Column and Major Publications Summary

• From 1982-2007 Dr. Hesse wrote a quarterly column in *Decision Line*, "In the Classroom," that featured teaching tips, mainly about spreadsheet use for solving quantitative models (49 articles). Rick has published 14 major articles (BOLD in pages 6-10 below) in *Interfaces (7), Operations Research (1), Decision Sciences (3), Foresight (2), Journal for Production and Inventory Management, and Journal of Applied Finance (1).*

Professional Publications Authored by R. Hesse (co-authors noted):

- Hesse, R., "Adjusting Forecasts with Seasonal Data", 51st National Conference Proceedings, Decision Sciences Institute, November 2020, Virtual Conference, **Best Learning and Research Paper Award 2020**
- Hesse, R. "A new r² for Time Series Data," 49th National Conference Proceedings, Decision Sciences Institute, November 2018, Chicago, IL. 2018
- DiLellio, J, Stanley, D, Hesse, R, "Risks and Opportunities of Inverse ETFs for Long Term Investors," *Journal of Applied Finance*. July 2014.
- Hesse, R, Hahn, J, Seaman, S and Shanahan, D, "E2B Projects for Decision Sciences MBA Courses: Opportunity & Challenges", INFORMS 2012 National Conference, Phoenix, AZ October 2012.
- "Augmented Learning for Decision Sciences Basic Quantitative MBA," Rick Hesse, Decision Sciences Institute National Conference, November 2012.
- Hesse, R, Book Reviews, *INTERFACES*, Volume 41, Number 6, November-December 2011, pages 601-604, "*Encyclopedia of Operations Research and Management Science.*," Editor James Cochran, Louisiana Tech, published by John Wiley & Sons, Hoboken, NJ. 6,480 pp.
- Hesse, R., Majidian, J., Kappes, A. "Real-time Expected Value vs. Expected Utility In-Class Group Exercise for Decision Trees," 41st Proceedings of Decision Sciences National Meeting (Vol 41), Decision Sciences Institute, San Diego, CA November 2011.
- Hesse, R. (2010). *Hessian Regression for Moving Averages* (1st ed., vol. 30). San Diego, CA: International Institute of Forecasters National Meeting, June 2011, Proceedings of International Institute of Forecasters.
- Hesse, R. & Scerno, D. "How Spreadsheets Changed the World," *INTERFACES*, April 2009, pages 159-167.

- Hesse, R., "Using Excel to Forecast: A review of two recent How-To Books", 2009, FORESIGHT: The International Journal of Applied Forecasting, International Institute of Forecasters, issue 15, pages 42-44, Fall.
- Hesse, R., "An Investigation of a New Classroom Evaluation Instrument," Decision Sciences Institute, Atlanta, Georgia, November 2007; Proceedings of 37th Decision Sciences Institute National Meeting.
- Hesse, R., "Incorrect Nonlinear Trend Curves in Excel," *FORESIGHT*, Vol 1, No. 3, Feb 2006, pages 39-43.
- Hesse, R., GBR Book Review: *Smarter, Faster, Better: Strategies for Effective, Enduring, and Fulfilled Leadership*, Sloan with Pollak, Recommended by Rick Hesse, D.Sc., Professor of Decision Sciences. Graziadio Business Review, Volume 9, Issue 4, 2006.
- Hesse, R., "Short-term Quadratic Regression for Moving Averages," Proceedings of the 36th National Decision Sciences Institute Conference, San Antonio, November, 2006, pages 27221-27226.
- Hesse, R., "Sesame Street for the Decision Sciences: Redux," *Decision Line*, Vol 38, No. 4, October 2007
- Hesse, R., "Simulating Heights and Weights using Regression," *Decision Line*, Vol 38, No. 2, March 2007
- Hesse, R., "Electronic Spreadsheets: The Good, the Bad & the Ugly," Graziadio Business Report, January 2007.
- Hesse, R., "PERT Simulation in Excel," Decision Line, Vol 37, No. 3, May 2006, pages 14-15.
- Hesse, R., "Reverse Engineering Cash Flow Revenues for Forecasting," *Decision Line*, Vol 37, No. 2, March 2006, pgs 13-15.
- Hesse, R., "Alldifferent Constraint and the Traveling Sales Problem Heuristics Part II," *Decision Line*, Vol 36, No 4, November 2005, pages 7-10.
- Hesse, R., "Alldifferent Constraint and the Traveling Sales Problem Heuristics Part I," *Decision Line*, Vol 36, No 3, September 2005, pages 10-13.
- Hesse, R., "Short Term Regression for Moving Averages," Proceedings of the 35th National Decision Sciences Institute Conference, San Francisco, November 2005, pages 12781-12786.
- Hesse, R., "Incorrect Nonlinear Curve Fits in Excel," 3rd International Symposium on Forecasting, San Antonio, June 2005.
- Hesse, R., "Truly Independent Variables," Decision Line, Vol 36, No. 2, June 2005, pages 12-14.
- Hesse, R., "Useful Excel Array Formulas and Range Functions," *Decision Line*, Vol 35, No. 4, November 2004
- Hesse, R., "Tickling the Solver with Backwards Bounds Constraints," *Decision Line*, Vol 35, No. 2, March 2004
- Hesse, R., "Using Excel to Demonstrate Random Numbers," with Dr. Russ Laher (Cal Tech) *Decision Line*, Vol. 34, No. 4, September/October 2003, pages 7-8, 18.
- Hesse, R., "Dollar Volume Discounts and Nonlinear Programming Quantity Discounts," *Decision Line*, Vol. 34, No. 3, May 2003, pages 8-11

- Hesse, R., "Does a Different Person Write Your E-mail?" *Decision Line*, Vol. 34, No. 1, December 2002/January 2003, pages 5-6 (I)
- Hesse, R., "Audio PowerPoint and Moving Graphs Make Presentations Easier," *Decision Line*, Vol. 33, No. 3, May 2002, pages 6-8.
- Hesse, R., "Simulation Case Exercise Using Excel," Spreadsheet Mini conference at the 32nd National Decision Sciences Institute Conference, San Diego, November 23, 2002.
- Hesse, R., "Reducing the Educational Variation in Fully-Employed MBA Decision Science Courses," Proceedings of the 31st National Decision Sciences Institute Conference, San Francisco, November 2001.
- Hesse, R., "Transportation Model Reports for Excel," *Decision Line*, March 2001, pages 7-9, 12, Vol 32, No. 2.
- Hesse, R., "Triangle Distribution," *Decision Line*, May 2000, pages 12-14, Vol 31, No. 3. *** *This is by far the most requested of all my papers, and consistently got requests about 14 times a year for the Excel templates from all over the world – 100+* ***
- Hesse, R., "Incorrect Nonlinear Curve Fits in Excel," Proceedings of the Western Decision Sciences Institute, April 2000.
- Hesse, R., "Improper Logarithmic Transformations in Excel," National Proceedings of the 30th Decision Sciences Institute, November, 2000.
- Hesse, R., "Dynamic Postoptimal Analysis", *Decision Line*, March 2000, Vol 31, No. 2.
- Hesse, R., "Traveling Salesperson Strings", *Decision Line*, Vol. 30, No. 3, pp 14-16, May 1999.
- Hesse, R., "Statistical Templates for Excel", 28th National DSI Convention, Las Vegas, November 1998
- Hesse, R., "Industry Consulting" at 28th National DSI Convention, Las Vegas, November 1998.
- Hesse, R., "Box and Whiskers Again", *Decision Line*, pages 19-21, Vol. 29, No. 5, Sept/Oct 1998.
- Hesse, R., "Modeling, Analysis and Spreadsheets: An Antidote for Dumb and Dumber," *Decision Line*, pages 21-22, Vol. 29, No. 3, May 1998.
- Hesse, R., "Normal Probability Plots," *Decision Line*, Vol. 29, No. 1, pages 17-19, Dec/Jan 1998.
- Hesse, R., "Excel Tips," Decision Line, Vol 30, No. 5, pp 16-18, Sept/Oct 1998
- "Box and Whiskers Plots," Decision Line, Vol. 28, No. 2, pp.17-18, March 1997
- Hesse, R., "Student Spreadsheet Models," *Decision Line*, Vol. 28, No. 1, pp18-19, Dec/Jan 1997.
- Hesse, R., "Dynamic Investments Using Lookup Tables," *Decision Line*, Vol. 26, No. 4, pp. 14-15, July 1995.
- Hesse, R., "More Graphs for Postoptimal LP," Decision Line, Vol. 25, No. 2, March 1994.
- Hesse, R., "Simple Graphs for Simple LP Problems," *Decision Line*, Vol. 25, No. 1, pp. 8-10, December/January 1994.
- Hesse, R., "Random Samples and Confidence Intervals," *Decision Line*, Vol. 24, No. 5, page 14, September/October 1993.
- Hesse, R., Marcontel, D. & Grun, A., "Center Wing Life Extension for the C-130," Journal for <u>Production and Inventory Management</u>, Third Quarter, Vol. 34, No. 3, pp. 36-38, 1993
- Hesse, R., "(Oops!)²," *Decision Line*, Vol. 23, No. 5, pp. 12-13, September/October 1992.

- Hesse, R., "Shortest Route and Spreadsheets," *Decision Line*, Vol. 23, No. 4, pp. 10-11, July 1992.
- Hesse, R., "Putting the Variance Back in Analysis of Variance," *Decision Line*, Vol. 23, No. 3, pp. 9-10, May 1992.
- Hesse, R., "Win as Much as You Can," *Decision Line*, Vol. 22, No. 3, page 10, May 1991.
- Hesse, R., "Spreadsheet Solvers and Forecasting," *Decision Line*, Vol. 22, No. 2, pp. 13-14, March 1991.
- Hesse, R., "New Directions in Decision Science Software for Microcomputers," 21st Proceedings of National Decision Sciences Meeting, Miami Beach, FL, November 1991.
- Hesse, R., "Optimizing Lot-Streaming Makespan Using Spreadsheets," *Decision Line*, Vol. 22, No. 5, September/October 1991.
- Hesse, R., "Simple Simplex or Hessian Regression," *Decision Line*, Vol. 21, No. 2, page 8, March 1990.
- Hesse, R., "Job Shop Scheduling and Spreadsheets," *Decision Line*, Vol. 21, No. 1, page 10, December 1989/January 1990.
- Hesse, R., "Turning Students 'On/Off' in Decision Sciences Courses," 20th Proceedings of National Decision Sciences Meeting, San Diego, CA, November 1990.
- Hesse, R., "Quick and Simple Simplex for LAD (MAD) Models," 20th Proceedings of National Decision Sciences Meeting, San Diego, CA, November 1990.
- Hesse, R., "Yield Management: Promise or Peril?" 19th Proceedings of National Decision Sciences Meetings, New Orleans, LA, November 1989.
- Hesse, R., "Spreadsheet Queuing," Decision Line, Vol. 20, No. 3, page 9, May 1989.
- Hesse, R., "Newsboys, Spreadsheets, and Data Tables," *Decision Line*, Vol. 20, No. 1, December 1988/January 1989.
- Hesse, R., "Excel: A General Spreadsheet Package That Can Be Used for Solving Complex Dynamic Programming Problems," *Decision Line*, Vol. 19, No. 2, March 1988.
- Hesse, R., "Lockboxes and Lotus," *Decision Line*, Vol. 19, No. 2, March 1988.
- Hesse, R., "Penny Wise and Pound Fuelish," 18th Proceedings of National Decision Sciences Meeting, Las Vegas, NV, November 1988.
- Hesse, R., "Of Marginal Interest," *Decision Line*, Vol. 18, No. 4, July 1987.
- Hesse, R., "Son of Log Transformation or Return of the Living Dead," *Decision Line*, Vol. 18, No. 1, December 1986/January 1987.
- Hesse, R., "Two Electronic Illusions," Decision Line, Vol. 17, No. 5, September/October 1986.
- Hesse, R., "Spreadsheet Simulation," Decision Line, Vol. 17, No. 3, May 1986.
- Hesse, R., "Functional Innumeracy," Decision Line, Vol. 16, No. 5, September/October 1985.
- Hesse, R., "M.A.D. About M.S.E. Regression," Decision Line, Vol. 16, No. 4, July 1985.
- Hesse, R., "Random Number Generation on Microcomputers," *Decision Line*, Vol. 16, No. 2, March 1985.
- Hesse, R., "Snow Job," Decision Line, Vol. 16, No. 1, December 1984/January 1985.
- Hesse, R., "The Effects of Mass Production," Decision Line, Vol. 15, No. 2, July 1984.

- Hesse, R., & Grum, A., "It's the Process Not the Product (Most of the Time)", <u>Interfaces</u>, Vol. 13, No. 5, pp. 89-93, 1983.
- Hesse, R., "Too Quick and Too Dirty: Least Squares for Exponential Curves," *Decision Line*, Vol. 14, No. 5, September/October 1983.
- Hesse, R., "Two False Endings to the Modified Assignment Problem: A Solution," <u>Interfaces</u>, Vol. 12, No. 4, August 1982.
- Hesse, R., "Putting the Variance Back into Analysis of Variance," *Decision Line*, Vol. 14, No. 4, July 1983.
- Hesse, R., "Waiting Lines (Queuing Theory)," *Decision Line*, Vol. 14, No. 3, May 1983.
- Hesse, R., Capt Weinstock, J., "Term End Exam Scheduling at the United States Military Academy," Southeast AIDS Proceedings, Williamsburg, VA, February 1983
- Hesse, R., "The Undergraduate Block Experience: Blending Management and Management Science," AIDS National Conference, National Proceedings of the American Institute of Decision Sciences, San Francisco, CA, 1982.
- Hesse, R., "Clint Eastwood Does Least Squares Fit of Exponential Curves: The Good, The Bad, and The Ugly," National Proceedings of the American Institute of Decision Sciences, San Francisco, CA, 1982.
- Hesse, R., "The AIDS/AI∆ Instructional Award for 1981 The Undergraduate Block Experience: Blending Management and Management Science," *Decision Line*, January 1982.
- Hesse, R., "Management/Science or Management Science?" <u>Interfaces</u>, Vol. 10, No. 1, pps. 104ff, February 1980.
- Hesse, R., "Practitioner's Panel: A Look at Real World Problems and the Academic Curriculum," National Proceedings of the American Institute of Decision Sciences, October 1978, co-authored with five others.
- Hesse, R., "Why Students Don't Do Well in Math A Remedial Approach," National Proceedings of the American Institute of Decision Sciences, October 1978.
- Hesse, R., "Gaulia Est Omnia Divisa in Partes Tres…" <u>Interfaces</u>, Vol. 7, No. 4, pp. 47-49, August 1977.
- Hesse, R. & Altman, S., "Star Trek: An Optimum Decision Making Model," <u>Interfaces</u>, Vol. 6, No. 3, May 1976
- Hesse, R., "Sesame Street for Decision Sciences: Part I Problems," <u>Decision Sciences</u>, pp. 654-659, October 1974.
- Hesse, R., "Sesame Street for Decision Sciences: Part II Some Designs for Integrated Decision Sciences and Organizational Behavior," <u>Decision Sciences</u>, pp. 659-663, October 1974.
- Hesse, R., "A Heuristic Search Procedure for Estimating a Global Solution of Nonconvex Programming Problems," <u>Operations Research</u>, pp. 1267-1280, Vol. 21, No. 6, November-December 1973. This was my doctoral dissertation.
- Hesse, R., "Solution of the Shortest Route Problem Using the Assignment Algorithm Technique," <u>Decision Sciences</u>, Vol. 3, No. 1, pp. 1-3, January 1972.
- Hesse, R., "Some Integrative Approaches to Decision Sciences and Quantitative Management," National Proceedings of the American Institute of Decision Sciences, November 1973.

- Hesse, R., "Markov Forecasting," National Proceedings of the American Institute of Decision Sciences, November 1972.
- Hesse, R., "A Communications and Behavioral Approach to Computer Language," <u>National</u> <u>Proceedings of the American Institute of Decision Sciences</u>, November 1971.
- Hesse, R., "An Integrated Approach to Undergraduate Business Curricula," <u>National Proceedings</u> of the American Institute of Decision Sciences, November 1971.
- Hesse, R., "Programs to Aid Students in Math," <u>Computing Newsletter</u>, page 1, April 1971.
- Hesse, R., "ACM Seminar: Business School computer Courses," <u>Datamation</u>, page 1, June 1970.

MANAGEMENT EXPERIENCE:

- August 2007- Jan 2013 Department Chair, Decision Sciences and Marketing, GSBM, Pepperdine University (6 ½ years); directed and evaluated 15 full-time faculty, 30 adjuncts. Successfully helped several junior faculty obtain tenure, scheduled teaching assignments for over 100 classes each semester at seven different locations.
- 1995-1996 Acting Department Chair, Industrial Engineering Department, Mercer University (1 year); 6 full-time faculty, hired 3 new faculty, promoted 3.
- 1990-1995 Chair, Mercer Engineering Personnel Committee; during Hesse's tenure as chair all candidates taken to the President Office received tenure including Civil, Mechanical and Electrical Engineering professors. I guided former military officers in working with publishers of their class textbooks to produce study guides, homework solutions, etc. and finding business publications to contribute to their output.
- **1985-87 Founder/Director of Georgia Tech Computer Institute** (2 years); hired and managed 10 employees, numerous subcontractors. Negotiated deep price cuts for 8 rooms of PCs and printers with NEC, IBM, Epson, and others. My staff developed courses in Excel, Word, AutoCAD, general computing for business professionals to take during the day at GTCI.

AWARDS:

- **2020 Best Learning and Education Research Paper**: Adjusting Forecasts with Seasonal Data. Decision Science Institute.
- 1982 The Outstanding Civilian Service Medal, Department of the Army, West Point; firstever recipient of this prestigious honor at West Point.
- **1982 The Order of the Four Chaplains, West Point**; for service by my wife and I running the high school youth group, weeknight Adult Bible study groups, and Adult Sunday School.
- 1981 Decision Science Institute Innovative Instructional Award;
- 1979 San Diego State University Outstanding Professor Award, School of Business.

PROFESSIONAL SERVICE

- Associate Editor of Transactions Online INFORMS (Institute for Operations Research and Management Science), 2006-2014
- Associate Editor of Foresight International Institute of Forecasters (IIF), 2007-2015
- Editor, "In the Classroom," *Decision Line*, **Decision Sciences Institute (DSI)** 1982-2007.

COMPUTER EXPERTISE:

- Mainframes/Minicomputers/PCs/Macs.
- Programmed first Numerical Control machine for IBM using the IBM 1620 and AUTOSPOT,

- Programmed first training program for LINC (first Biomedical computer) for the Biomedical Computer Center, Washington University Biomedical Department.
- Experienced in Excel, Word, PowerPoint, Camtasia, and Jing Videos.
- Published "How Spreadsheets Changed the World," Hesse & Scerno, *INTERFACES*, April 2009, pages 159-167 on the 25th anniversary of the electronic spreadsheet.

COMMUNITY SERVICE:

- Red Cross (Alaskan Airlines Flight 261 Feeding helpers of the disaster recovery Jan-Feb 2000, Ventura, CA)
- Adult Sunday School teacher various churches around the country over the years- some classes as large as 100+. 1974-2015
- Family 2 Family serving lunch monthly to homeless in Ventura, California (2000-2012)
- Statistician for Character Counts, Josephson Institute of Ethics (2006-2012)
- Scripture Reader, Christ of the Cumberland Lutheran Church, (2018-2019)