L. Allison Jones-Farmer

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Education

Ph.D. Applied Statistics. The University of Alabama College of Commerce and Business Administration (1997). Dissertation: *Topics on Data Intensive and Computationally Intensive Control Charting Methods.* Advisor: William H. Woodall.

M.S. Applied Statistics. The University of Alabama College of Commerce and Business Administration (1996).

B.S. Mathematics, *Magna Cum Laude*. Birmingham Southern College, Birmingham, Alabama, (1990).

Refereed Journal Articles

Niemesh, G.T., **Jones-Farmer, L.A.**, Hart, J., and Holmes, W.* (2020). The Impact of Land Bank Demolitions on Property Values. To appear in *Economics Bulletin*.

Baghdadi, A., Cavuoto, L.A., Esfahani, E.T., **Jones-Farmer, L.A.**, Rigdon, S.E., Megahed, F.M (2020). "Monitoring Worker Fatigue Using Wearable Devices: A Case Study to Detect Changes in Gait Parameters." To appear in *Journal of Quality Technology*.

Martinez, W.M., Weese, M.L., and **Jones-Farmer. L.A.** (2020). A One-Class Peeling Method for Multivariate Outlier Detection with Applications in Phase I SPC. *Quality and Reliability Engineering International* 36(4), 1272-1295.

Jones-Farmer, L.A. (2019). Leveraging Industrial Statistics in the Data Revolution: The Youden Memorial Address at the 63rd Annual Fall Technical Conference. *Quality Engineering* 31(2), 205-211.

Shepherd, D.K, **Jones-Farmer, L.A.**, Rigdon, S.E., and Bodden, K.M. (2018). To Shrink or Not to Shrink: Hotellings T^2 Chart Based on Shrunken Covariance Estimates. *Quality and Reliability Engineering International*, 34, 1211-1227.

Weese, M.L., Martinez, W.G., and **Jones-Farmer, L.A.** (2017). On the Selection of the Bandwidth Parameter for the k-chart. *Quality and Reliability Engineering International*, 33, 1527-1547.

Mazzei, M., Rutherford, M., **Jones-Farmer, L.A.**, and Oswald, S. (2016). Does Establishing Sociopolitical Legitimacy Overcome Liabilities of Newness? A Longitudinal Analysis of Top Performers. *Group & Organization Management*, doi:10.1177/1059601116676391.

Almer, E.D., Baldwin, A.A., **Jones-Farmer, L.A.**, Lightbody, M., and Single, L.F. (2016). Tenure Track Opt-Outs: Leakages from the Academic Pipeline. *Advances in Accounting Education: Teaching and Curriculum Innovations, 1-36.*

Weese, M., Martinez, W., Megahed, F., and **Jones-Farmer, L.A.** (2016). Statistical Learning Methods Applied to Process Monitoring: An Overview and Perspective. *Journal of Quality Technology*, 48(1), 4-27.

Cegielski, C, and **Jones-Farmer, L.A.** (2016). Knowledge, Skills, and Abilities for Entry-Level Business Analytics Positions: A Multi-Method Study. *Decision Sciences Journal of Innovative Education*, 14 (1), 91-118. ***Winner of the DSJIE 2016 Best Research Article Award.***

Bourrie, D.M., **Jones-Farmer, L.A.**, and Sankar, C.S. (2016). Learning Technologies: Bridging the Gap between Intention, Adoption, and Routine Use. *International Journal of Engineering Education,* 32(5), 2107-2120.

Bourrie, D.M., **Jones-Farmer, L.A.**, and Sankar, C.S. (2016). Growing the Intention to Adopt Educational Innovations: An Empirical Study. *Knowledge Management and E-Learning* 8(1), 22-38.

Saleh, N., Mahmoud, M.A., **Jones-Farmer, L.A.**, Zwetsloot, I., and Woodall, W.H. (2015). Another Look at the EWMA Control Chart with Estimated Parameters. *Journal of Quality Technology*, 47 (4), 363-382.

Keefe, M.J., Woodall, W.H., and **Jones-Farmer, L.A.** (2015). The Conditional In-Control Run Length Performance of Self-Starting Control Charts. *Quality Engineering*, 27 (4), 488-499.

Bourrie, D.M., Sankar, C.S., and **Jones-Farmer. L.A.** (2015). Conceptualizing Interactions between Innovation Characteristics and Organizational Members' Readiness to Adopt Educational Innovations. *International Journal of Engineering Education*, 31 (4), 967-985.

Walker, A.G., **Jones-Farmer, L.A.**, DeBode, J.D., Smither, J.W., and Smith, R.D. (2014). Using Latent Profile Regression to Explore the Relationship between Religiosity and Work-related Ethical Judgments. *Journal of Religion and Business*, 3, 1-33.

Bourrie, D.M.*, Cegeilski, C.G., **Jones-Farmer, L.A.**, and Sankar, C. (2014). Identifying Characteristics of Dissemination Success Using an Expert Panel. *Decision Sciences Journal of Innovative Education*, 12(4), 357-380.

Smith, H.W.[*], Megahed, F., **Jones-Farmer, L.A.**, and Clark, M. (2014). Using Visual Data Mining to Enhance the Simple Tools in Statistical Process Control. *Quality and Reliability Engineering International*, 30, 905-917.

Hazen, B. T., Boone, C. A., Ezell, J. D. [*], & **Jones-Farmer, L.A.** (2014). Data Quality for Data Science, Predictive Analytics, and Big Data in Supply Chain Management: An Introduction to

the Problem and Suggestions for Research and Applications. *International Journal of Production Economics*, 154, 72-80.

Jones-Farmer, L.A., Woodall, W.H., Steiner, S., and Champ, C.W. (2014). An Overview of Phase I Analysis for Process Improvement and Monitoring. *Journal of Quality Technology*, 46(3), 265-280. ***Winner of the Lloyd Nelson award for the paper with the greatest immediate impact to practitioners from the Statistics division of the American Society for Quality.***

Bell, R.C.[*], **Jones-Farmer, L.A.**, and Billor, N (2014). A Distribution-Free Multivariate Phase I Location Control Chart for Subgrouped Data from Elliptical Distributions. *Technometrics*, 56(4), 528-538.

Jones-Farmer, L.A., Ezell, J.D.[*], and Hazen, B.T.[*](2014). Applying Control Chart Methods to Enhance Data Quality. *Technometrics*, 56(1), 29-41. (Invited presentation at the *INFORMS Technometrics* session, 2013, Minneapolis).

Becton, B., Walker, J., and **Jones-Farmer, L.A**. (2014). Generational Differences in Workplace Behavior. *Journal of Applied Social Psychology*, 44(3), 175-189.

Perdomo, B.L. [*], **Jones-Farmer, L.A.**, Edwards, B.D., and Svyantek, D. (2014). The Robustness of ME/I Evaluations to Among-Group Dependence. *Structural Equation Modeling: A Multidisciplinary Journal*, 21, 40-53.

Hazen, B.T.[*], Kung, L.[*], Cegeilski, C., and **Jones-Farmer, L.A.** (2014). Performance Expectancy and Use of Enterprise Architecture: Training as an Intervention. *Journal of Enterprise Information Management*, 27(2).

Cegeilski, C., **Jones-Farmer, L.A.**, Wu, Y.[*], and Hazen, B.T.[*] (2012). Adoption of Cloud Computing Technologies in Supply Chains: An Organizational Information Processing Theory Approach. *International Journal of Logistics Management*, 23(2), 184-211.

Hazen, B. T.[*], Wu, Y.[*], Cegielski, C., **Jones-Farmer, L.A.** & Hall, D. (2012). Consumer Reactions to the Adoption of Green Reverse Logistics. *International Review of Retail, Distribution and Consumer Research*, 22(4), 417-434.

Hazen, B.T.[*], Sankar, C., Wu, Y.[*], and **Jones-Farmer, L.A.** (2012). A Proposed Framework for Educational Innovation Dissemination. *Journal of Educational Technology Systems*, 40(3), 301-321.

Hazen, B.T.[*], Overstreet, R.E.[*], **Jones-Farmer, L.A.**, and Feild, H.S. (2012). The Role of Ambiguity Tolerance in Consumer Perception of Remanufactured Products. *International Journal of Production Economics*, 135(2), 781-790.

Jones-Farmer, L.A. and Champ, C.W. (2010). A Distribution-Free Phase I Control Chart for Subgroup Scale. *Journal of Quality Technology*, 42(4), 373-387.

Jones-Farmer, L.A. (2010). The Effect of Among Group Dependence on the Invariance Likelihood Ratio Test. *Structural Equation Modeling: A Multidisciplinary Journal*, 17(3), 464-480.

[*] Indicates student under Jones-Farmer's supervision

Nair, A., **Jones-Farmer, L.A.** and Swamidass, P. (2010). Modeling the Reciprocal and Longitudinal Effect of Return on Sales and R&D Intensity During Economic Cycles: 1997-2003 Emerges as an R&D-Propelled Cycle. *International Journal of Technology Management*,49, 2-24.

Jones-Farmer, L.A., Jordan, V., and Champ, C.W. (2009). Distribution-free Phase I Control Charts for Subgroup Location. *Journal of Quality Technology*, 41(3), 304-317.

Becton, J.B.*, Feild, H., Giles, B., **Jones-Farmer, L.A.** (2008). Racial Differences in Promotion Candidate Performance and Reactions to Selection Procedures: A Field Study in a Diverse Top-Management Context. *Journal of Organizational Behavior*, 29, 265-285.

Jones-Farmer, L.A., Pitts, J.*, Rainer, K. (2008). A Note on Multigroup Invariance Using SAS Proc CALIS. *Structural Equation Modeling: A Multidisciplinary Journal*, 15(1), 154-173.

Champ, C.W., **Jones-Farmer, L.A.** (2007). Properties of Multivariate Control Charts with Estimated Parameters. *Sequential Analysis*, 26(2), 153-169.

Walker, H.J.*, Feild, H., Giles, B., Bernerth, J.B., and **Jones-Farmer, L.A**. (2007). An Assessment of Attraction Toward Affirmative Action Organizations: Investigating the Role of Individual Differences. *Journal of Organizational Behavior*, 28, 485-505.

Jensen, W.A., **Jones-Farmer, L.A.**, Champ, C.W., and Woodall, W.H. (2006) Effects of Parameter Estimation on Control Chart Properties: A Literature Review. *Journal of Quality Technology*, 38, 349-364.

Blanthorne, C., **Jones-Farmer, L.A.**, and Almer, E. (2006). Why You Should Consider SEM: A Guide to Getting Started. *Advances in Accounting Behavioral Research*, 9, 179-207.

Champ, C.W., **Jones-Farmer, L.A.**, and Rigdon, S.E. (2005). Properties of the T^2 Control Chart When Parameters are Estimated. *Technometrics*, 47, 437-445.

Champ, C.W., **Jones, L.A.** (2004). Designing Phase I $\bar{X}$ Charts with Small Sample Sizes. *Quality and Reliability Engineering International*, 20, 497-510.

Jones, L.A., Champ, C.W., and Rigdon, S.E. (2004). The Run Length Distribution of the CUSUM with Estimated Parameters. *Journal of Quality Technology*, 36, 95-108.

Jones, L.A., and Champ, C.W. (2002). Phase I Control Charts for Times Between Events. *Quality and Reliability Engineering International*, 18, 479-488.

Jones, L.A. (2002). The Statistical Design of EWMA Control Charts with Estimated Parameters. *Journal of Quality Technology*, 34, 277-288.

Sullivan, J.H., and **Jones, L.A.** (2002). A Self-Starting Control Chart for Multivariate Individual Observations. *Technometrics*, 44, 24-34.

Jones, L.A., Champ, C.W., and Rigdon, S. (2001). The Performance of Exponentially Weighted Moving Average Control Charts with Estimated Parameters. *Technometrics*, 43,

156-167. (Invited presentation at the ASA/ASQC Fall Technical Conference *Technometrics* session, 2001).

Stoumbos, Z.G., and **Jones, L.A.** (2000). On the Properties and Design of Individual Control Charts Based on Simplicial Depth. *Nonlinear Studies*, 7(2), 146-177

Jones, L.A., Woodall, W.H., and Conerly, M.D. (1999). Exact Properties of Demerit Control Charts. *Journal of Quality Technology*, 31, 207-216

Jones, L.A., and Woodall, W.H. (1998). The Performance of Bootstrap Control Charts. *Journal of Quality Technology*, 30, 362-375.

Jones, L.A., and Woodall, W.H. (1997). A Runs Rule Alternative to Level Crossings in Statistical Process Control. *Journal of Statistical Computation and Simulation*, 59, 315-331.

Other Refereed Publications

Stevens, N. and **Jones-Farmer, L.A.** (2017) Invited Discussion for Analyzing Behavioral Big Data: Methodological, Practical, Ethical, and Moral Issues. *Quality Engineering*, 29(1), 84-86.

Jones-Farmer, L.A. and Stevens, N. (2017). Invited Discussion for Bridging the Gap between Theory and Practice in Basic Statistical Process Monitoring. *Quality Engineering*, 29(1), 22-26.

Megahed, F. and **Jones-Farmer, L.A.** "A Statistical Process Monitoring Perspective on Big Data." *Frontiers in Statistical Quality Control*, 11, Springer International Publishing, 2015, 29-47.

Jones-Farmer, L.A. (2007). In Ruggeri, F., Kenett, R., and Faltin, F.W. (eds), *Attributes Control Charts* (pp. 389-392). John Wiley & Sons Ltd, Chichester: Encyclopedia of Statistics in Quality and Reliability.

Stoumbos, Z.G., **Jones, L.A.**, Woodall, W.H., and Reynolds, M.R. Jr. (2001). "On Nonparametric Multivariate Control Charts Based on Data Depth." *Frontiers in Statistical Quality Control*, 2001, 6, pp. 207-227. Edited by H.J. Lenz and P.T. Wilrich, Physica-Verlag, Heidelberg, Germany.

Research in Submission

Megahed, F.M. **Jones-Farmer, L.A.**, Cai, Mioa, Rigdon, S.E., and Mohamed, M. A Statistical Process Monitoring Perspective on Human Performance Modeling in the Age of Cyber-Physical Systems. Submitted to *Frontiers in Statistical Quality Control*. (This is a refereed research monograph.)

Hajifar, S., Hongyue, S., Megahed, F.M., **Jones-Farmer, L.A.**, and Cavuoto, L.A. (2020). A Forecasting Framework for Predicting Perceived Fatigue: Using Time Series Methods to Forecast Ratings of Perceived Exertion with Features from Wearable Sensors. Submitted for publication.

Research Related Service

Associate Editor of *Technometrics* (January 2000-July 2005).

Case Studies Editor, *Journal of Quality Technology* (2018-present)

Editorial Review Board, *Journal of Quality Technology* (August 2010-present)

Special Issue Editor, *Quality Engineering* (2019)

Guest Editor, *Journal of Quality Technology* (July 2016-2018)

Shewhart Medal Committee, (2014-present)

Scientific Program Committee, The Stu Hunter Research Conference (February 2019)

Scientific Program Committee, International Symposium for Business and Industrial Statistics (ISBIS, July 2020), Brock University, Ontario, Canada.

Referee for *JRSS-C*; *Quality and Quantity*, *IIE Transactions*, *Sequential Analysis*, *Technometrics*, *Journal of Nonparametric Statistics*, *Journal of Quality Technology*, *Communications in Statistics*, *Journal of Statistical Computation and Simulation*, and *Quality and Reliability Engineering International*, *Mathematics.*

Sponsored Activities

Externally Funded Research

Director. "Auburn University Business Analytics Learning Lab." (2013-2014). Directed and managed the acquisition of high performance computing hardware and software to create a research lab in business analytics. Supporting and directing two Ph.D. research projects in business analytics ("Variance Estimates and Event Detection in Social Media Streams", and "Creating Business Value from Big Data Analytics Capability and Organization Improvisational Capability"). **Funded** by Blue Cross Blue Shield of Alabama. Funding: $25,000 per year.

Co-Principal Investigator. "Predictors of Dissemination Success of STEM Learning Innovations: An Empirical Investigation." (2011-2013). Principal Investigator: Chetan Sankar, Ph.D. **Funded** through NSF: Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics (TUES), Program Solicitation NSF 10-544. Funding: $200,000.

Principal Investigator. "Cost Analysis in Pharmaceutical Interventions based on Medicaid Claims." (2012-2013). **Contracted** by Health Information Design. Funding: $8,000.

Senior Personnel. "Investigating Cyber-attacks to the Banking Industry." (2013-2014) Principal Investigator: Robert Norton. Other senior personnel include Greg Weaver, Casey Cegielski, and David Umphress. **Contracted** National Bank headquartered in Southeastern U.S. Funding: $50,000.

Research participant (5% effort) in "Cardiovascular Program Project, Biobehavioral Bases of CHD Risk and Management." (2000-2002) Principal Investigator: Neil Schneiderman, Ph.D. **Funded** by National Institute of Health. Total Annual Funding: $1,294,539.

Corporate Sponsored Activities

Founder/Director. "Miami University Center for Analytics and Data Science (CADS)" (2015-2018). Established vision, mission, and operating strategy for the University-Wide center that included faculty from three academic divisions; Raised over $1.5M in corporate sponsorship in support of the center. Managed $200K operating budget. Hired, managed, and supported the salary of two assistant directors for the center. Hired and managed over 30 student interns through the center who participated in corporate sponsored analytics projects. Oversaw development of the EY Analytics Learning Lab with R and Python tutorials. **Funded** by Multiple Corporate Partners. Significant gifts related to CADS include:

- **Corporate Sponsorship**. Recruited seven corporate partners to the Center, totaling $525,000
- **Scholarship Funding.** Supported the development of $500,000 in endowed scholarship funding from a major donor to support analytics students to support study-away and study-abroad activities through the Center for Analytics and Data Science.
- **EY Analytics Learning Lab.** Raised $400,000 to support the development of the EY Analytics Learning Lab as part of the Center for Analytics and Data Science.
- **Foundation Grant to Sponsor Annual DataFest.** Raised a total of $40,000 from P&G and Vantiv (now Worldpay) to sponsor the annual Center for Analytics and Data Science DataFest hackathon for 2017-2019.
- **Sponsored Projects.** Developed relationships that brought multiple corporate/student analytics projects in text mining, predictive modeling, forecasting, and data infrastructure consulting totaling over $40,000 in funding.

Other Funded Research

The School of Business Competitive Summer Research Award (2013). "Big Data = Big Opportunities for Research in Statistical Process Control" Funding: $23,000.

The School of Business Competitive Summer Research Award (2012). "Alternative Estimation for Phase II Process Control." Funding: $22,000.

The School of Business Competitive Summer Research Award (2011). "Data Quality and Business Analytics." Funding: $20,000.

Auburn University Intramural Grant (2010-2011). "Quality Control Methods for Improving Data Quality for Business Analytics." Support provided for software and graduate research assistant support. Funding: $4,000.

Daniel F. Breeden Award (2006). Provided support for "Interactive Web-based Materials in the Undergraduate Statistics Classroom." Funding: $3,500.

The School of Business Competitive Summer Research Award, University of Miami, (1999) "The Performance of Exponentially Weighted Moving Average Control Charts with Estimated Parameters." Funding: $15,000.

The School of Business Competitive Summer Research Award, University of Miami, (1998) "On the Properties and Design of Individual Control Charts Based on Simplicial Depth." Funding: $15,000.

Selected Presentations

"Leveraging Industrial Statistics in the Data Revolution." Invited Youden Keynote Address. Fall Technical Conference of the American Statistical Association, West Palm Beach, FL (October 2018). (Presenter)

"Under the Sun: The Importance of Case Study Documentation and Publication to the Future of Industrial Statisics." Invited Presentation at the International Statistical Engineering Symposium of the Fall Technical Conference of the American Statistical Association, Gaithersburg, MD (September 23-27, 2019). (Presenter)

"To Shrink or Not to Shrink: Hotelling's T^2 Chart Based on Shrunken Covariance Estimates." Co-authors: Shepherd, D.K., Rigdon, S.E. Invited presentation and the Joint Statistical Meetings of the American Statistical Association, Vancouver, B.C. (July, 2018). (Presenter)

"One-Class Peeling for Outlier Detection in High Dimensions." Co-authors: Weese, M., Martinez, W. Invited presentation at the Joint Research Conference of the American Statistical Association and Institute of Mathematical Statistics, Sata Fe, NM (June, 2018). (Co-author)

Invited Discussant at the Stu Hunter Research Conference, Roanoke, VA (March 2018).

"Update on Statistical Learning Applied to Process Monitoring." Co-authors: Weese, M., Martinez, W., and Megahed, F. Invited presentation at the Fall Technical Conference of the American Statistical Association, Philadelphia, PA (October 2017). (Presenter)

Session moderator and Invited Discussant "Bridging the Gap between Theory and Practice in Basic Statistical Process Monitoring," Stu Hunter Research Conference, Waterloo, CA (March 2016). (Moderator/Discussant)

"On the Selection of the Bandwidth Parameter for the k-Chart." Co-authors: Weese, M., Martinez, W., Invited presentation at the Fall Technical Conference of the American Statistical Association, Houston, TX (October 2016). (Co-author)

"What we learned from Visualizing 25 Years of Statistics Research", co-authors: Alhwiti,T.*, Yazdi, M.A.*, Weese, M., Megahed, F.M. Invited Presentations INFORMS Annual Meeting, Nashville, TN (November, 2016). (Co-author)

"A One-Class Ensemble Based Control Chart for Multivariate Process Monitoring." Co-authors: Martinzez, W.G., Weese, M.L. Invited presentation at ASQ Chemical Industries and Process Division 59th Annual Fall Technical Conference, Houston, TX (October, 2015). (Co-Author)

"What Can We Learn from Statistical Learning in Statistical Process Control." Co-authors: Weese, M., Martinez, W., Megahed, F. Invited presentation at the International Symposium on Statistical Process Control, Padua, Italy (July 2015). (Presenter)

"Statistical Learning Methods Applied to Process Monitoring: An Overview and Perspective." Co-authors: Weese, M.L., Martinez, W.G., Megahed, F.M.Invited presentation at 32nd Annual Quality & Productivity Research Conference, Raleigh, NC, (June, 2015). (Co-author)

"Statistical Learning Methods Applied to Process Monitoring: An Overview and Perspective." Co-authors: Weese, M., Martinez, W., Megahed, F. Invited presentation at the Spring Research Conference of the American Statistical Association, Cincinnati, OH (May 2015). (Presenter)

"Big Data = Big Opportunities for Research and Collaboration." Co-author: Megahed, F.M. Invited presentation at the Fall Technical Conference of the American Society for Quality, San Antonio, TX (October 2013). (Presenter)

"Applying Control Chart Methods to Enhance Data Quality." Co-authors: Ezell, J.D.*, and Hazen, B.T.* Invited presentation in the *Technometrics* session of the INFORMS Conference, Minneapolis, MN (October, 2013). (Presenter)

"Statistical Monitoring of Microblog Media Streams." Co-author: Ezell, Jeremy D.* Invited presentation in the Social Media Analytics session of the INFORMS Conference, Minneapolis, MN (October, 2013). (Presenter)

"A Statistical Process Monitoring Perspective on Big Data." Co-author: Megahed, F.M. Invited presentation at XIth International Workshop on Intelligent Statistical Quality Control, Sydney, Australia (August, 2013) (Co-author)

"A Distribution-Free Multivariate Phase I Location Control Chart," Co-authors, Bell, R.*, and Billor, N. INFORMS Annual Meeting, Phoenix, AZ (October, 2012). (Presenter)

"A Robust Hotellings T^2 Control Chart for Retrospective Location Analysis of Individuals," Co-authors, Bell, R.*, and Billor, N. Women in Industrial Engineering Academia Workshop, Istanbul, Turkey (June, 2012). (Poster)

"A Distribution-Free Multivariate Phase I Location Control Chart for Subgrouped Data from Elliptical Distributions", Co-authors, Bell, R.*, and Billor, N. Women in Industrial Engineering Academia Workshop, Istanbul, Turkey (June, 2012). (Poster)

"Business Analytics, Data Quality, and Statistical Process Control: Review and Opportunities for Collaboration," 2011 Quality and Productivity Research Conference, American Society for Quality, Roanoke, VA (June, 2011). (Presenter)

"A Nonparametric Method of Establishing an In-Control Reference Sample for Multivariate Quality Control Monitoring," Co-authors: Bell, R.C.*, Billor, N., and Maghsoodloo, S., 54th Annual Fall Technical Conference of the American Statistical Association, American Statistical Association, Birmingham, AL (October, 2010). (Co-author)

* Indicates student under Jones-Farmer's supervision

"Nonparametric Control Charts," Co-author: Jordan, V., 51st Annual Fall Technical Conference of the American Statistical Association, American Statistical Association, Jacksonville, FL (October, 2007). (Presenter)

"Herding Cats: The Reality of Teaching Undergraduate Business Statistics in a Large Lecture Format," Undergraduate Business Statistics Symposium, McGraw-Hill, Santa Fe, NM (October, 2006). (Presenter)

"Properties of Multivariate Control Charts with Estimated Parameters" Co-author: Champ, C. 12th International Conference on Statistics, Combinatorics, Mathematics, and Applications, Auburn, AL (December, 2005). (Co-author)

"Dear Reviewer Number One: Maybe I Should Have Used SEM, But Now It's Too Late." Co-authors: Blanthorne, C., and Almer, A. Accounting, Behavioral and Organizational section of the American Accounting Association, Chicago, IL (October, 2004). (Presenter)

"The Performance of Exponentially Weighted Moving Average Control Charts with Estimated Parameters." Co-author: Champ, C. Invited presentation in the Technometrics session of the Fall Technical Conference of the American Statistical Association, Toronto, Canada (October, 2001). (Presenter)

"The Design of Exponentially Weighted Moving Average Control Charts with Estimated Parameters." Co-author: Champ, C. Invited presentation at Statistics: Reflections on the Past and Visions for the Future, San Antonio, TX (March, 2000). (Presenter)

"The Performance of EWMA Charts when No Standards are Given." Co-author: Champ, C. Joint Statistical Meetings of the American Statistical Association, Baltimore, MD (August, 1999). (Presenter)

"Measuring the Performance of Control Charts when Parameters are Estimated." Co-author: Champ, C. Invited presentation at the Department of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA (May, 1999). (Presenter)

"The Performance of Bootstrap Control Charts." Co-author: Woodall, W.H. Presented at the Joint Statistical Meetings of the American Statistical Association, Dallas, TX (August, 1998). (Presenter)

Employment

Miami University, Van Andel Professor of Business Analytics (2014-present) and Founding Director of the Miami University Center for Analytics and Data Science (2015-2018).

Significant Leadership:

- Founded Miami University Center for Analytics and Data Science.
- Raised $1.5M in corporate sponsorship and scholarship funds in support of the center.
- Managed $200K operating budget.
- Hired, managed, and supported the salary of two assistant directors for the center.
- Hired and managed over 30 student interns through the center.

- Oversaw development of the EY Analytics Learning Lab with R and Python tutorials.
- Served as the research mentor for three new assistant professors in the Department of Information Systems and Analytics.
- Co-developed college-wide standards for measuring scholarship impact in accordance with AACSB guidelines.
- Co-led the development of department-wide standards for measuring scholarship impact in a diverse department.
- Led a state-wide initiative for determining the undergraduate core business statistics standards for all two- and four-year institutions in Ohio.
- Managed growth in undergraduate Analytics Co-Major from 14 to over130 students in three years.
- Managed growth in undergraduate Business Analytics Minor from 120 to over 250 students in three years.
- Chaired four academic search committees to hire tenure track faculty, two in Information Systems, and three in Analytics.

Significant Curricula Development:

- Proposed, co-developed, and co-managed the approval process of new Master of Science in Business Analytics
- Proposed, co-developed, and co-managed the approval process of new Bachelor of Science in Business Analytics
- Proposed, designed, co-developed, and managed implementation of new undergraduate core courses in statistics and analytics.
- Managed redesign of undergraduate Business Analytics Minor.
- Managed redesign of multidisciplinary Analytics Co-Major.
- Proposed and co-developed new major in Business Analytics.
- Developed and managed the undergraduate Practicum in Business Analytics. This required soliciting projects from corporate clients, managing client relationships, managing student teams, and delivering solutions to clients.
- Developed web-based content for the capstone course (Advanced Predictive Modeling) of the Graduate Certificate in Analytics for Professionals.

Undergraduate Courses Taught:

Regression Analysis
Time Series and Forecasting
Business Analytics Practicum (external client-based project class)

Graduate Courses Taught:

Advanced Predictive Modeling—Online, Executive Education
Communicating with Data
Graduate Analytics Practicum (external client-based research class)

Auburn University, C&E Smith Professor of Statistics and Analytics (2014). C&E Smith Associate Professor of Statistics and Analytics (2012-2014). Associate Professor of Statistics with tenure (2005-2012). Assistant Professor of Statistics (2003-2005). Raymond J. Harbert College of Business, Auburn, Alabama.

Significant Curricula Development:

- Business Analytics: Developed curriculum and four new courses for an undergraduate major, minor and MBA concentration in Business Analytics. Coordinated closely with industry executives and advisory boards. Managed all administrative transactions for program and course approval at all levels of the College, University, and State of Alabama. Received approval for the Business Analytics minor (Spring 2012) and major (Spring 2013).
- Business Analytics: Developed two undergraduate core-curriculum courses in Business Analytics. Coordinated closely with industry executives and advisory boards. Managed all administrative transactions for course approval and core-curriculum revision at all levels of the College and University. Effective Fall 2011, these courses are required for all Harbert College of Business undergraduates.
- Ph.D. Curriculum: Designed the quantitative methods curriculum and developed all statistical methods courses for the Ph.D. program in the College of Business. The course offerings include statistical methods, linear models, multilevel models, and latent variable models. The emphasis is on developing a sound statistical foundation to enable students to use advanced statistical methods for applied research and to write their results in a clear and correct manner. Managed all administrative transactions for program and course approval at all levels of the College and University.

Course Management Responsibilities:

- Area Coordinator for Business Analytics and Statistics (2003-2014).
  - Developed promotional videos and hybrid classroom content for business analytics courses.
  - Scheduled classes and instructors for all business analytics and statistics courses in the Harbert College of Business.
  - Led faculty searches for both tenure-track and non-tenure-track faculty positions.
  - Provided leadership and mentoring to faculty to maintain the currency of the information taught in business analytics and statistics courses.
  - Acted as the Business Analytics and Statistics liaison with the Harbert College, Auburn University, and industry.
- Managed Business Analytics I and Business Analytics II courses (2011-2014). These courses comprise approximately twenty-five sections per academic year with approximately 70-100 students per section. Responsibilities include:
  - Scheduling all classes.
  - Hiring and mentoring both non-tenure-track and tenure-track/tenured faculty.

    - Coordinating syllabi, technology, and instructional materials.
    - Ensuring academic integrity is maintained.
    - Coordinating AACSB assessment activities.
- Managed Introductory Statistics courses (2003-2011). This core-curriculum course was replaced with Business Analytics I and II in Fall 2011. This course comprised approximately fifteen sections per academic year with approximately 100-130 students per section. Responsibilities included:
    - Scheduling all classes.
    - Hiring and mentoring both non-tenure-track and tenure-track/tenured faculty.
    - Coordinating syllabi, technology, and instructional materials.
    - Ensuring academic integrity was maintained.
    - Coordinating AACSB assessment activities.
- Managed Ph.D. methods courses (2003-2014). Managed the content, design, and scheduling of the methods courses in the Ph.D. programs in the Harbert College.

Undergraduate Courses Taught:

Introductory Statistical Methods (Large-lecture Format)
Business Analytics I and II
Predictive Modeling

Graduate Courses Taught:

Quantitative Methods (MBA, Executive Education)
Predictive Modeling (Master's)
Analytics in Supply Chain (Executive Short-Course)
Applied Regression Analysis (Ph.D.)
Applied Linear and Multilevel Models (Ph.D.)
Structural Equation Modeling (Ph.D.)

University of Miami, Assistant Professor of Management Science (1997-2002). College of Business, Coral Gables, Florida.

Undergraduate Courses Taught:

Introductory and Intermediate Statistical Methods

Graduate Courses Taught:

Advanced Quantitative Analysis (M.B.A.)
Applied Regression Analysis (M.S., Executive Education, Ph.D.)
Applied Multivariate Analysis (M.S., Ph.D.)
Hierarchical Linear Models (Ph.D.)

University of Alabama, Graduate Instructor (1995-1996). College of Commerce and Business Administration, Tuscaloosa, Alabama.

Southwestern Bell Corporation, Marketing Data Consultant (1991-1994), Sales Manager (1990-1991), Texas.

- Directed statistical analysis applied to process optimization and design.
- Conducted executive seminars and employee training on the concepts of Statistical Process Improvement.
- Trained and supervised employees in sales and customer service.

Student Research Supervision

Students for whom I served as chair or co-chair of committee:

Name	Degree	Year	Current Status
Richard Bell	Ph.D.-IE	2011	Col, U.S. Army
Brian Perdomo	M.S.-Psych	2011	Ph.D. Candidate, I/O Psychology, Auburn University
Eric Drake	M.S.-Mgt Science	2000	Retired Lt. Col, U.S. Army
Juan Capmany	M.S.-Mgt Science	1999	Director of Credit Risk Management, Credit Acceptance

Students for whom I served as a member of thesis committee:

Name	Degree	Year	Current Status
Jason DeBode	Ph.D.-Mgt	2014	Assistant Professor, Missouri State University
David Bourrie	Ph.D.-IS	2014	Assistant Professor Information Systems, University of South Alabama
Seyedamirabbas Mousavian	Ph.D.-IE	2014	Assistant Professor, Clarkson University
Brandon Johnson	M.S.-Psych	2013	Ph.D. Candidate I/O Psychology, Auburn University
Julie Hetzler	Ph.D.-Psych	2009	Director, Global Leadership Development, Marriott International
Vanessa Johnson	Ph.D.-Psych	2009	I/O Psychologist DMDC
Kimberly Johnson	Ph.D.-Mgt	2009	Associate Professor, Auburn University Mongtomery
Feruzan Irani	Ph.D.-Mgt	2008	Associate Professor, Georgia Southern University

Jennifer Pitts	Ph.D.-IS	2006	Assistant Professor, Columbus State University
Bret Becton	Ph.D.-Mgt	2005	Professor, University of Southern Mississippi
Phil Chanselor	Ph.D.-Mgt	2005	Retired Lt. Col., U.S. Air Force
Lisa Telford	M.S.-Psych	2003	unknown
Naomi Montague	Ph.D.-IE	2002	Hematologist, Broward Health Medical Center
Angoon Sungkhapong	Ph.D.-IE	2000	unknown

Students for whom I served as a member of Ph.D. qualifying committee:

Name	**Degree**	**Year**	**Current Status**
Jason DeBode	Ph.D.-Mgt	2013	Assistant Professor, Missouri State University
David Bourrie	Ph.D.-IS	2013	Assistant Professor, University of South Alabama
Matthew Mazzei	Ph.D.-Mgt	2013	Assistant Professor, Samford University
Jing Hua	Ph.D.-Mgt	2012	Assistant Professor, Auburn University, Montgomery
Min Carter	Ph.D.-Mgt	2008	Assistant Professor, Troy University
Frank Morris	Ph.D.-IS	2006	Assistant Professor, The Citadel

University Service

Leadership Related Service

- Farmer School of Business P&T Committee (2017-2020)
- Miami University Convergence Committee (2016-2017)
- Chair of P&T Review Committee for Finance Department (2015-2016)
- Farmer School of Business Leadership Initiative Committee (2015-2016)
- Faculty representative on the AU Board of Trustees' Institutional Advancement Committee (2013-2014)
- Priorities and Goals Committee (2008-2010)
- Graduation Rate Task Force (2008-2010)
- Harbert College Faculty Grievance Committee (2005-2007)
- Childcare subcommittee of the Auburn University Worklife Committee (2004-2006)

Curriculum/Teaching Related Service

- Chair of Analytics Co-major task force (2015-2016)
- Chair of Business Analytics Minor task force (2014-2015)
- Management and MIS Ph.D. admissions committee (2004-2010)
- Management and MIS Ph.D. annual review committee (2004-2010)
- Harbert College Ph.D. program curriculum committee (2003-present)
- University Ad-Hoc committee to develop guidelines for curriculum review of courses containing statistics content (September 2012-present)
- Harbert College Undergraduate Programs Committee (2004-2006; 2010-2012)
- Responsible for coordinating AACSB assessment for Business Analytics and Statistics area. (2005-present)
- Lowder Endowed Teaching Award Selection Committee (2008)
- MBA Outreach Improvement Task Force (2008). Made detailed recommendations for improvement in the organization, management, and delivery of the Distance MBA program.
- MBA Scholarship Committee (2008-2009)
- MBA Projects, Faculty Judge (2007, 2008, 2009, 2010)

Research Related Service

- Farmer School of Business Research Committee (2016-2017)
- Farmer School of Business Research Computing Task Force (2015-2016)
- Farmer School of Business Scholarship Oversight Committee (2014-2016)
- Information Systems & Analytics Scholarship Oversight Committee (2014-2015)
- Harbert College Endowed Chair Selection Committee (2012-2013)
- Harbert College Research Committee (2012-present)
- Endowed Professorship Award Committee (2012)
- Graduate Faculty Designation Task Force (2010). Responsible for writing the guidelines each graduate faculty designation in the Management Department.

Search Committees

- Member of Dean's Search Committee (2019-20)
- Chair of Assistant Professor Search Committee (2019-20)
- Member of Direct of Graduate Programs Search Committee (2019)
- Member of Director of Center for Analytics and Data Science Search Committee (2019)
- Chair of Assistant Professor Search Committee (2018)
- Chair of (2) Assistant/Associate Professor Search Committees (2017)
- Member of Assistant Professor Search Committee (2016)
- Chair of Assistant/Associate Professor Search Committee (2015)
- Chair of Assistant Professor Search Committee (2015)

- Member of Assistant Professor Search Committee (2014)
- Chair of Assistant Professor Search Committee (2013)
- Member of Eminent Scholar Search Committee (2013)
- Chair of Lecturer Search Committee (2012)
- Chair of Visiting Assistant Professor Search Committee (2012)
- Member of the Director of Undergraduate Career Services Search Committee (2012)
- Chair of Lecturer Search Committee (2006)

Academic Awards

General Awards

- Van Andel Endowed Professorship (2014-present)
- Clyde and Evelyn Smith Endowed Professorship (2012-2014)
- Faculty Excellence in Service, Farmer School of Business (2016)

Teaching Awards

- Miami University, Nominated for Richard K. Smucker Endowed Teaching Award (2018,19)
- Auburn University, Departmental Outstanding Teaching Award (2012)
- Auburn University, MBA Core Teacher of the Year (2008)
- Auburn University, Edward L. Lowder Endowed Teaching Award (2005)
- University of Miami, Excellence in Teaching Award (1999)

Research Awards

- Lloyd Nelson Award from the Statistics Division of the American Statistical Association. Awarded to the paper with the largest immediate impact to practitioners in 2015.
- DSJIE 2016 Best Research Article Award

Relevant Academic Honors

- Phi Beta Kappa (Academic Honor Society recognizing excellence in liberal arts and science)
- Mu Sigma Rho (Statistics Honor Society)
- Minnie C. Miles Outstanding Graduate Student in the College of Commerce and Business Administration, University of Alabama (1997)
- American Society of Quality Control Richard A. Freund International Scholarship (1996-1997)
- University of Alabama National Alumni Association Graduate Fellowship (1996-1997)
- Mu Sigma Rho Outstanding Graduate Instructor, University of Alabama (1995-1996)

Professional Affiliations

Elected Member of the International Statistics Institute
Member of the American Statistical Association
Senior Member of the American Society for Quality
Member of INFORMS