KENNETH C. LICHTENDAHL JR.
(Casey)

ADDRESS

Darden School of Business
University of Virginia
P. O. Box 6550, Charlottesville, VA 22906-6550
100 Darden Blvd., Charlottesville, VA 22903
(Shipping/Overnight Delivery)

Tel: (434) 924-7708
Fax: (434) 243-7678
Mobile: (434) 466-3736
lichtendahlc@darden.virginia.edu
http://faculty.darden.virginia.edu/LichtendahlC/

PROFESSIONAL EXPERIENCE

University of Virginia, Charlottesville, Virginia.

2013-Present	Associate Professor of Business Administration (with tenure).
2019-2020	On leave at Google.
2006-2013	Assistant Professor of Business Administration.
	Darden School of Business, Quantitative Analysis Area.

Google, Sunnyvale, California.

2019-Present	Data Scientist/Visiting Researcher.
	Operations Data Science.

University College London, London, UK.

2016 (March)	Visiting Instructor for *Data Analytics II*.
	Management Science Department.

Indian School of Business, Hydrabad and Mohali, India.

2015 (Term 7)	Visiting Associate Professor of Business Administration.
	Information Systems.

1992-2010	**Tradewinds Beverage Company**, Cincinnati, OH.
	Co-founder, Consultant, and Director.
	Acquired by Nestlé Waters North America in 2011.

EDUCATION

2001-2006	**Duke University**, Durham, NC.
	Ph.D. in Business Administration, May 2006.
	Decision Sciences Area, Fuqua School of Business.

1999-2001	**Stanford University**, Stanford, California.
	M.S. in Statistics, June 2001.
	M.S. in Management Science and Engineering, June 2001.

1996-1998	**University of Virginia**, Charlottesville, Virginia.
	M.B.A., Darden School of Business, May 1998.
	Faculty Award for Academic Excellence.

1987-1992	**Princeton University**, Princeton, New Jersey.
	A.B. in Economics, June 1992.

PEER-REVIEWED PUBLICATIONS

Winkler, Robert L., Yael Grushka-Cockayne, Kenneth C. Lichtendahl Jr., and Victor Richmond R. Jose (2019), "Probability Forecasts and Their Combination: A Research Perspective," *Decision Analysis*, **16** (4).

Grushka-Cockayne, Yael, K. C. Lichtendahl Jr, Victor Richmond R. Jose, and Robert L. Winkler (2017). Quantile Evaluation, Sensitivity to Bracketing, and Sharing Business Payoffs. *Operations Research*, **65** (3), 712-728.

Grushka-Cockayne, Yael, Victor Richmond R. Jose, and K. C. Lichtendahl Jr. (2017), Ensembles of Overfit and Overconfident Forecasts. *Management Science*, **63** (4), 712-728

Jose, Victor Richmond R., Yael Grushka-Cockayne, and Kenneth C. Lichtendahl Jr. (2014), "Trimmed Opinion Pools and the Crowd's Calibration Problem," *Management Science*, **60** (2), 463-475.

Pfeifer, Phillip E., Yael Grushka-Cockayne and K. C. Lichtendahl Jr. (2014), The Promise of Prediction Contests. *The American Statistician*, 68 (4), 264-270.

Chao, Raul O., Kenneth C. Lichtendahl Jr., and Yael Grushka-Cockayne (2014), "Incentives in a Stage-Gate Process," *Production and Operations Management*, **23** (8), 1286-1298.

Lichtendahl Jr., Kenneth C., Yael Grushka-Cockayne, and Phillip E. Pfeifer (2013), "The Wisdom of Competitive Crowds," *Operations Research*, **61** (6), 1383-1398.

Lichtendahl Jr., Kenneth C., Yael Grushka-Cockayne, and Robert L. Winkler (2013), "Is It Better to Average Probabilities or Quantiles?," *Management Science* **59** (7), 1594-1611.

Lichtendahl Jr., Kenneth C. and Samuel E. Bodily (2012), "Multiplicative Utilities for Health and Consumption," *Decision Analysis*, **9** (4), 314-328.

Lichtendahl Jr., Kenneth C., Raul O. Chao, and Samuel E. Bodily (2012), "Habit Formation From Correlation Aversion," *Operations Research*, **60** (3), 625-637.

Lichtendahl Jr., Kenneth C. and Samuel E. Bodily (2010), "Preferences for Consumption Streams: Scale Invariance, Correlation Aversion, and Delay Aversion under Mortality Risk," *Operations Research*, **58** (4), 985-997.

Lichtendahl Jr., Kenneth C. (2009), "Random Quantiles of the Dirichlet Process," *Statistics and Probability Letters*, **79** (4), 501-507.

Lichtendahl Jr., Kenneth C. and Robert L. Winkler (2007), "Probability Elicitation, Scoring Rules, and Competition Among Forecasters," *Management Science*, **53** (11), 1745-1755.

BOOKS

Shmueli, Galit and Kenneth C. Lichtendahl Jr. (2016). *Practical Time Series Forecasting with R (Second Edition)*. Axelrod Schnall Publishers.

Shmueli, Galit, Peter C. Bruce, Inbal Yahav, Nitin R. Patel, and Kenneth C. Lichtendahl, Jr. (2018) *Data Mining for Business Analytics: Concepts, Techniques, and Applications in R*. Wiley & Sons.

WORKING PAPERS

Lichtendahl Jr., Kenneth C., Yael Grushka-Cockayne, Victor Richmond R. Jose and Robert L. Winkler, "Extremizing and Anti-Extremizing in Bayesian Ensembles of Binary-Event Forecasts", revise and resubmit at *Operations Research*.

Guo, Xiaojia, Yael Grushka-Cockayne, and Kenneth C. Lichtendahl Jr., "Forecasting Life Cycles Using a Tilted-Gompertz Trend and Exponential Smoothing", revise and resubmit at *Operations Research*.

Stouras, Konstantinos, Sanjiv Erat, Kenneth C. Lichtendahl Jr. (2020), "An Equilibrium Analysis of Competing Contests."

R PACKAGE

Yael Grushka-Cockayne, Victor Richmond R. Jose, Kenneth C. Lichtendahl Jr., and Huanghui Zeng (2014), "trimTrees".

OTHER PUBLICATIONS

Lichtendahl Jr., Kenneth C. and Robert L. Winkler (2020), "Why Do Some Combinations Perform Better Than Others?," *International Journal of Forecasting*, **36** (1). Discussion in the Special Issue on the M4 Competition.

Winkler, Robert L., Victor Richmond R. Jose, Kenneth C. Lichtendahl Jr., and Yael Grushka-Cockayne (2018), "Contributed Discussion" of "Using Stacking to Average Bayesian Predictive Distributions (with Discussion)" by Yao, Vehtari, Simpson, and Gelman., *Bayesian Analysis*, **13** (3), 917-1003.

De Reyck, Bert, Xiaojia Guo, Yael Grushka-Cockayne, Kenneth C. Lichtendahl Jr., Andrey Karasev, Tom Garside, Neville Coss, and Frederick Tasker. (2016). APOC Business Process Reengineering Big Data Study. Technical Report.

Grushka-Cockayne, Yael and Kenneth C. Lichtendahl Jr., "Is it Better to Trust the Best Expert, or the Average of a Group of Experts?", Case in Point, *Washington Post*, November 16, 2013.

Lichtendahl Jr., Kenneth C. (2010), "Bayesian Aggregation of Experts' Forecasts," *Wiley Encyclopedia of Operations Research and Management Science*. Published Online, January 14, 2010.

Laseter, Tim, Kenneth C. Lichtendahl Jr., and Yael Grushka-Cockayne (2010), "Cleaning the Crystal Ball," *Strategy + Business*, May 2010.

Jose, Victor Richmond R., Kenneth C. Lichtendahl Jr., Robert F. Nau, and Robert L.Winkler (2007), "Objective Bayesian Analysis for the Multivariate Normal Model: Comment," in J.M. Bernardo et al., eds., *Bayesian Statistics 8*, Oxford: Oxford University Press, 2007, 557-558.

TEACHING EXPERIENCE

Instructor for MBA/EMBA/PhD Courses, Darden School of Business, University of Virginia.
       EMBA Elective Course, *Data Science in Business*. Spring 2019.
       MSBA Course, *Data Analytics I* and *II*, 2018-2019.
       MBA Elective Course, *Data Science in Business*. Fall 2014-2018.

MSBA Course, *Decision Analysis and Statistics*, Fall 2018.
MBA Core Course, *Decision Analysis*. Fall 2006-2017, Spring 2007-2010, 2012-2013, 2018.
Course Head 2015-2018.
MBA Elective Course, *Data Analysis and Optimization*. Spring 2010, 2017.
MBA Elective Course, *Forecasting*. Fall 2013.
MBA Elective Course, *Managerial Quantitative Analysis*. Spring 2007.
EMBA Core Course, *Decision Analysis*. Spring 2012, Fall 2014.
PhD Course, *Data Science for Researchers*. Spring 2016, 2017.
Global Business Experience/Darden Worldwide Course - India. 2015-2016.

Instructor for Executive Education Courses, Darden School of Business, University of Virginia.
Managing the Corporate Aviation Function. Spring 2009-2015, 2017-2019.
AES Finance Leadership Development Program. Spring 2011, 2012.
Strategic Analysis and Decision Making. Fall 2012-2018, Spring 2013-2017.
Partnership for Leaders in Education. Summer 2014, 2015.

Instructor for Advanced Master's Program Course, Department of Systems and Information Engineering, University of Virginia.
Data Science. Spring 2015-2019.
Applied Optimization. Summer 2007.
Decision Analysis. Fall 2015-2017.

Instructor for Undergraduate Course, Economics Department, Duke University.
Decision Making in Business (Econ 195-93). Fall 2005, Spring 2006.

TEACHING MATERIALS

Lichtendahl Jr., Kenneth C., Elena Loutskina, Yael Grushka-Cockayne, and Gerry Yemen (2019). *Connecticut Avenue Securities: Sharing Data*.

Lichtendahl Jr., Kenneth C. and Paul Holtz (2019). *Carvana: IsBadBuy?*.

Lichtendahl Jr., Kenneth C. and Paul Matherne (2015). *Neonatal Care at GHSC (A)* and *Neonatal Care at GHSC (B)*.

Grushka-Cockayne, Yael, Kenneth. C. Lichtendahl Jr., Andrew Green, and Temple Fennell (2015). *Opening Casino Jack*.

Grushka-Cockayne, Yael, Kenneth. C. Lichtendahl Jr., Bert De Reyck, and Ioannis Fragkos (2015). *A/B Testing at Vungle*.

Lichtendahl Jr., Kenneth C. and Andrew Kritzer (2014). *Yahoo's Acquisition of Tumblr*. Case Study and Teaching Note, Darden Business Publishing, UVA-QA-0818, 2014.

Lichtendahl Jr., Kenneth C. "Segmenting Clinton and Obama Voters". Case Study and Teaching Note, Darden Business Publishing, UVA-QA-0807, 2013.

Lichtendahl Jr., Kenneth C. and Yael Grushka-Cockayne. "Surveying Professional Forecasters". Case Study and Teaching Note, Darden Business Publishing, UVA-QA-0805, 2013.

Gupta, Rohit, Kenneth. C. Lichtendahl Jr., Yael Grushka-Cockayne. "Ocean's Dilemma". Case Study and Teaching Note, Darden Business Publishing, UVA-QA-0789, 2012.

Lichtendahl Jr., Kenneth C. and Yael Grushka-Cockayne, "Ballis's Benchmark (A) and (B)," Case Studies and Teaching Note, UVA-F-1621 and UVA-F-1622, 2011.

Lichtendahl Jr., Kenneth C. and Yael Grushka-Cockayne, "Scoring Expert Forecasts," Technical Note, UVA-QA-0772, 2011.

Lichtendahl Jr., Kenneth C. and Yael Grushka-Cockayne, "Forecasting Engine," On-line Exercise, 2010.

Lichtendahl Jr., Kenneth C. and Yael Grushka-Cockayne, "PriceMax," Case Study and Teaching Note, UVA-QA-0748, 2010.

Lichtendahl Jr., Kenneth C. and Michel Schlosser, "Skanska USA Building," Case Study and Teaching Note, UVA-QA-0735, 2009.

Lipson, Marc, Samuel E. Bodily, and Kenneth C. Lichtendahl Jr., "Kelly Solar," Case Study and Teaching Note, UVA-F-1606, 2009.

Lichtendahl Jr., Kenneth C., Samuel E. Bodily, and Robert T. Clemen, "SnackChips in China," Case Study and Teaching Note, UVA-QA-0698, 2008.

Lichtendahl Jr., Kenneth C. and Samuel E. Bodily, "Airbus and Boeing: Superjumbo Decisions," Case Study and Teaching Note, UVA-QA-0720, 2008.

PROFESSIONAL RECOGNITIONS AND SERVICE

Winner, 2019 Publication Award, INFORMS Decision Analysis Society, "Ensembles of Overfit and Overconfident Forecasts" with Yael Grushka-Cockayne and Victor R.R. Jose.

Academic Co-Director, UVA's *M.S. in Business Analytics* Program, 2017-2019, 2020-Present.

Associate Editor, *Operations Research*, 2018-2020.

Member, Cluster Hire Search Committee, Business Data Science, 2017-2019.

Associate Editor, *Management Science*, 2013-2020.

Associate Editor, *Decision Analysis*, 2011-2020.

Chair, INFORMS Decision Analysis Society Conference: Advances in Decision Analysis, June 2017.

Faculty Marshall, Darden School of Business Graduation, 2016.

Outstanding Faculty Award, Darden School of Business, 2015.

Finalist, 2015 Publication Award, INFORMS Decision Analysis Society, "The Wisdom of Competitive Crowds" with Yael Grushka-Cockayne and Phil Pfeifer.

Outstanding Case Teacher, The Case Centre Awards and Competitions 2015, The Case Centre, Bedfordshire, England. Submission included course materials, teaching evaluations, and student/faculty testimonials for the elective MBA course *Data Science in Business*.

Faculty Advisor, Faculty Sponsor for Graduation Picnic. (2014 - Present).

Faculty Advisor, Community Consultants of Darden. (2014 - Present).

Member, Appointments Committee, Darden School of Business, 2014-Present.

Local Chair, INFORMS Decision Analysis Society Conference: Advances in Decision Analysis, June 2014.

Finalist (one of two Runners-up), 2014 Publication Award, INFORMS Decision Analysis Society, "Multiplicative Utilities for Health and Consumption" with Samuel E. Bodily.

Best Paper in *Decision Analysis*, 2012 Decision Analysis Special Recognition Award for "Multiplicative Utilities for Health and Consumption" with Samuel E. Bodily.

Finalist (one of two Runners-up), 2010 Publication Award, INFORMS Decision Analysis Society, "Preferences for Consumption Streams: Scale Invariance, Correlation Aversion, and Delay Aversion under Mortality Risk" with Samuel E. Bodily.

Honorable Mention (Runner-up), 2007 Publication Award, INFORMS Decision Analysis Society, "Probability Elicitation, Scoring Rules, and Competition Among Forecasters" with Robert L. Winkler, Announced 2009.

Finalist, 2007 Student Paper Award, INFORMS Decision Analysis Society, "Probability Elicitation, Scoring Rules, and Competition among Forecasters" with Bob Winkler, Announced 2007.
Nominee, Darden Outstanding Faculty Award, Nominated by Second-Year MBA Students, 2009, 2010, 2011, 2012.

Nominee, Darden Outstanding Faculty Award, Nominated by Second-Year MBA Students, 2009, 2010, 2011, 2012, 2013.

Exceptional Faculty Recognition, Darden School of Business, Recognized for MBA teaching performance in the top 10% of student ratings, 2007 and 2012.

Honored Faculty, University of Virginia's Mead Endowment and The John Colley Award, Program's mission is to identify outstanding teachers, promote the University's unique tradition of faculty involvement with students, and encourage faculty to take part in that tradition, 2009.

Runner-up, Decision Sciences Institute Teaching Case Competition, "Ballis's Benchmark," 2011.

Runner-up, INFORMS Case Competition, "PriceMax," 2010.

Council Member, INFORMS Decision Analysis Society, 2009-Present.

Co-cluster Chair, Decision Analysis track at INFORMS Annual Meeting, 2009 and 2010.

Session Chair, INFORMS Annual Meeting, 2006 and 2007.

Reviewer, *Management Science*, *Operations Research, Decision Analysis*, *Manufacturing and Service Operations Management, Production and Operations Management*.

Member, Academic Standards Committee, Darden School of Business, Academic Year 2008-2011.

Member, Mission Statement Review Group, Darden School of Business, 2008 and 2012.

Co-founder and Co-organizer, "Dana Clyman Research Seminar Series," Darden School of Business, joint seminar series for the areas of Marketing, Operations, and Quantitative Analysis, 2007-Present.

Member, 314- (INFORMS), Decision Analysis Society.

Member, Phi Kappa Beta, Beta of North Carolina, Duke University, 2009.

CONFERENCE PRESENTATIONS AND PROCEEDINGS

Fry, C., Lichtendahl Jr., K.C., International Symposium on Forecasting, "Consolidated framework for forecast generation and evaluation", Keynote Practitioner Talk (October 2020).

De Reyck, B., Fragkos, I., Grushka-Cockayne, Y., Lichtendahl Jr., K.C., Guerin, H., Kritzer, A., INFORMS, "Vungle Inc. Improves Monetization Using Big-Data Analytics," Nashville, TN. Paper. (November 2016).

"The Benefits of Eliciting, Evaluating, and Aggregating Forecasters' Quantiles," INFORMS Annual Meeting, San Francisco, CA, November 2015.

"Crowdsourcing Critical Fractiles from Overconfident Forecasters," INFORMS Annual Meeting, San Francisco, CA, November 2015.

PhD Summer Academy Course offered on *Decision Analysis*, MIT Logistics Center, Zaragoza, Spain, 2014.

"The Benefits of Eliciting, Evaluating, and Aggregating Forecasters' Quantiles," INFORMS Decision Analysis Society Conference: Advances in Decision Analysis, Georgetown Univeristy, June 2014.

"The Benefits of Eliciting, Evaluating, and Aggregating Forecasters' Quantiles," INFORMS Annual Meeting, Minneapolis, MN, October 2013.

"Teaching Decision Analysis with the Case Method," INFORMS Annual Meeting, Minneapolis, MN, October 2013.

"Is It Better to Average Probabilities or Quantiles?," INFORMS Annual Meeting, Phoenix, AZ, October 2012.

"State-Dependent Hyperbolic Discounting," INFORMS Annual Meeting, Phoenix, AZ, October 2012.

"Habit Formation From Correlation Aversion," INFORMS Annual Meeting, Austin, TX, November 2010.

"Valuing Risky Income Streams From Consumption Preferences," INFORMS Annual Meeting, Austin, TX, November 2010.

"Consumption and Portfolio Planning Using Multilinear Preferences," INFORMS Annual Meeting, San Diego, CA, October 2009.

"Preferences for Health and Consumption," INFORMS Annual Meeting, Washington, D.C., October 2008.

"Preferences for Multiperiod Consumption Streams," INFORMS Annual Meeting, Washington, D.C., October 2008.

"Probability Elicitation, Scoring Rules, and Cooperation among Forecasters," INFORMS Annual Meeting, Seattle, WA, November 2007.

"Bayesian Opinion Pools," INFORMS Annual Meeting, Pittsburgh, PA, November 2006.

"Scoring Rules, Competition among Forecasters, and Probability Reconciliation" in Plenary Poster Session, ISBA Eighth Valencia International Meeting on Bayesian Statistics, Alicante, Spain, June 2006.

"Probability Elicitation, Scoring Rules, and Competition among Forecasters." INFORMS Annual Meeting, Denver, CO, October 2004.

"Bayesian Nonparametric Combination of Multivariate Expert Probability Judgments." INFORMS Annual Meeting, Denver, CO, October 2004.

"A Bayesian Model for Incorporating Continuous Expert Assessments," INFORMS Annual Meeting, San Jose, CA, November 2002.

INVITED TALKS AND COURSES

"Bayesian Ensembles of Binary-Event Forecast", Operations, Information and Decision Department Research Seminar, Wharton School, University of Pennsylvania, February 2017.

"Bayesian Ensembles of Binary-Event Forecast", Decision Sciences Research Seminar, School of Business, George Washington University, March 2017.

"The Wisdom of Competitive Crowds," IMBS Conference on "Wisdom of the Crowd", University of California, Irvine, April 2013.

"The Wisdom of Competitive Crowds," Center for Discrete Mathematics and Theoretical Computer Science (DIMACS) Workshop on "The Science of Expert Opinion," Rutgers University, October 25, 2011.

"The Wisdom of Competitive Crowds," Georgetown University, McDonough School of Business, October 7, 2011.

"Habit Formation From Correlation Aversion." Operations Research and Industrial Engineering Seminar Series, The University of Texas at Austin, November 5, 2010.

"Elicitation in Decision Making." Statistical and Applied Mathematical Sciences Institute (SAMSI), Risk: Perception, Policy, and Practice Workshop, Durham, NC, October 3-4, 2007.

"Decision Making for Senior Managers" Course. FAA Center for Management and Executive Leadership. April 23-24, 2007.

"Probability Elicitation, Scoring Rules, and Competition among Forecasters," INSEAD, Singapore, April 2006.