CURRICULUM VITAE
Victor De Oliveira
March 2020

OFFICE ADDRESS

Department of Management Science and Statistics

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EDUCATION

Degree	Institution	Major	Year
Ph.D.	University of Maryland	Statistics	1997
M.S.	Simon Bolivar University	Water Resources	1990
B.S.	Simon Bolivar University	Mathematics	1986

PROFESSIONAL EXPERIENCE

Professor, Department of Management Science and Statistics, The University of Texas at San Antonio, 2015–present

Associate Professor, Department of Management Science and Statistics, The University of Texas at San Antonio, 2006–2015

Assistant Professor, Department of Mathematical Sciences, University of Arkansas, 2001–2006. Earned tenure in 2006

Associate Professor, Department of Scientific Computing and Statistics, Simón Bolívar University, Venezuela, 2000–2001

Assistant Professor, Department of Scientific Computing and Statistics, Simón Bolívar University, Venezuela, 1998–1999

Postdoctoral Research Fellow, National Institute of Statistical Sciences, North Carolina, 1997–1998

Lecturer, Department of Mathematics, Simón Bolívar University, 1989–1992

AWARDS AND HONORS

The Canadian Journal of Statistics Award. Conferred by the Statistical Society of Canada for most outstanding article from the journal in 2017, 2018

Distinguished Achievement Award. Conferred by the American Statistical Association Section on Statistics and the Environment, 2010

Award for Excellence in Promoting Academic Integrity, Intelligent Living and Meaningful Learning. Conferred by the Students of the University of Texas at San Antonio and Honors Alliance, 2009

Elected Member of the International Statistical Institute, 2006

Maquis Who's Who in Science and Engineering, 2005

Member of the Venezuelan System for the Advancement of Research, Level I, 1999–2002

MAIN RESEARCH INTERESTS

Bayesian methods, Density ratio models, Environmental Statistics, Geostatistics, Markov random fields, Spatial prediction, Space–time modeling

BOOK

Kedem, B., **De Oliveira, V.** and Sverchkov, M. (2017), *Statistical Data Fusion*, World Scientific

ARTICLES

De Oliveira, V. and Ecker, M. (2020), "A Non–Stationary Non–Gaussian Hedonic Spatial Model for House Selling Prices." *Communications in Statistics–Simulation and Computation*, to appear

Han, Z.[1] and **De Oliveira, V.** (2020), "Maximum Likelihood Estimation of Gaussian Copula Models for Geostatistical Count Data." *Communications in Statistics–Simulation and Computation*, to appear

Tejas, C., Patnaik, S.S., Nguyen, H.N., Ng, E.Y.K., Narayanan, S., Muluk, S.C., **De Oliveira, V.** and Finol, E.A. (2020), "A Comparative Study of Biomechanical and Geometrical Attributes of Abdominal Aortic Aneurysms in the Asian and Caucasian Populations." *Journal of Biomechanical Engineering*, 142(6), 061003

De Oliveira, V. (2020), " Models for Geostatistical Binary Data: Properties and Connections." *The American Statistician*, 74, 72-79

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[1]Current/Former Ph.D. student

Wu, W., Rengarajan, B., Thirugnanasambandam, M., Parikh, S.A., Gomez, R., **De Oliveira, V.**, Muluk, S.C. and Finol, E.A. (2019), "Wall Stress and Geometry Measures in Electively Repaired Abdominal Aortic Aneurysms." *Annals of Biomedical Engineering*, 47, 1611-1625

Han, Z.[1] and **De Oliveira, V.** (2018), "gcKrig: An R Package for the Analysis of Geostatistical Count Data Using Gaussian Copulas." *Journal of Statistical Software*, 87 (13), 1-32

Parikh, S.A., Gomez, R., Thirugnanasambandam, M., Chauhan, S.S., **De Oliveira, V.**, Muluk, S.C., Eskandari, M.K. and Finol, E.A. (2018), "Decision Tree Based Classification of Abdominal Aortic Aneurysms Using Geometry Quantification Measures." *Annals of Biomedical Engineering*, 46, 2135-2147

De Oliveira, V., Wang, B.[1] and Slud, E.V. (2018), "Spatial Modeling of Rainfall Accumulated Over Short Periods of Time." *Journal of Multivariate Analysis*, 166, 129-149

Kedem, B. and **De Oliveira, V.** (2018), "On Joint Analysis of Testicular Germ Cell Cancer." *Journal of Urology and Research*, 5 (1), 1097

De Oliveira, V. and Kedem, B. (2017), "Bayesian Analysis of a Density Ratio Model." *The Canadian Journal of Statistics*, 45, 274-289

Chauhan, S.S., Gutierrez, C.A., Thirugnanasambandam, M., **De Oliveira, V.**, Muluk, S.C., Eskandari, M.K. and Finol, E.A. (2017), "The Association Between Geometry and Wall Stress in Emergently Repaired Abdominal Aortic Aneurysms." *Annals of Biomedical Engineering*, 45, 1908-1916

Han, Z.[1] and **De Oliveira, V.** (2016), "On the Correlation Structure of Gaussian Copula Models for Geostatistical Count Data." *Australian and New Zealand Journal of Statistics*, 58, 47-69

De Oliveira, V. and Kone, B.[1] (2015), "Prediction Intervals for Integrals of Some Types of Non-Gaussian Random Fields: A Semiparametric Bootstrap Approach." In: *JSM Proceedings*, Statistics and the Environment Section. Alexandria, VA: American Statistical Association, pp 2588-2597

De Oliveira, V. and Kone, B.[1] (2015), "Prediction Intervals for Integrals of Gaussian Random Fields." *Computational Statistics and Data Analysis*, 83, 37-51

Jing, L.[1] and **De Oliveira, V.** (2015), "geoCount: An R Package for the Analysis of Geostatistical Count Data." *Journal of Statistical Software*, 63 (11), 1-33

De Oliveira, V. and Trindade, A.A. (2014), "Spatial Statistics." In: *Encyclopedia of Social Network Analysis and Mining*. R. Alhajj and J. Rokne (eds.) Springer, pp 1976-1990

Raut, S.S., Jana, A., **De Oliveira, V.**, Muluk, S.C. and Finol, E.A. (2014), "The Effect of Uncertainty in Wall Vascular Material Properties on Abdominal Aortic Aneurysm Wall Mechanics." In: *Computational Biomechanics for Medicine.* B. Doyle, K. Miller, A. Wittek, and P.M.F. Nielsen (eds.) Springer, pp 69-86

De Oliveira, V. (2014), "Poisson Kriging: A Closer Investigation." *Spatial Statistics*, 7, 1-20

De Oliveira, V. (2013), "Hierarchical Poisson Models for Spatial Count Data." *Journal of Multivariate Analysis*, 122, 393-408

Raut, S.S., Jana, A., **De Oliveira, V.**, Muluk, S.C. and Finol, E.A. (2013), "The Importance of Patient–Specific Regionally Varying Wall Thickness in Abdominal Aortic Aneurysm Biomechanics." *Journal of Biomechanical Engineering*, 135(8), 081010

Ecker, M.D., **De Oliveira, V.** and Isakson, H. (2013), "A Note on a Non–stationary Point Source Spatial Model." *Environmental and Ecological Statistics*, 20, 59-67

De Oliveira, V. (2012), "Bayesian Analysis of Conditional Autoregressive Models." *Annals of the Institute of Statistical Mathematics*, 64, 107-133

Song, J.J. and **De Oliveira, V.** (2012), "Bayesian Model Selection in Spatial Lattice Models." *Statistical Methodology*, 9, 228-238

De Oliveira, V. and Ferreira, M.A.R. (2011), "Maximum Likelihood and Restricted Maximum Likelihood Inference for a Class of Gaussian Markov Random Fields." *Metrika*, 74, 167-183

De Oliveira, V. (2010), "Objective Bayesian Analysis for Gaussian Random Fields." In: *Frontiers of Statistical Decision Making and Bayesian Analysis—In Honor of James O. Berger.* M.-H. Chen, D.K. Dey, P. Muller, D. Sun and K. Ye (eds.) Springer, pp 497-511

De Oliveira, V. and Rui, C.[1] (2009), "On Shortest Prediction Intervals in Log–Gaussian Random Fields." *Computational Statistics and Data Analysis*, 53, 4345-4357

De Oliveira, V. and Song, J.J. (2008), "Bayesian Analysis of Simultaneous Autoregressive Models." *Sankhyā*, 70-B, 323-350

Ecker, M. and **De Oliveira, V.** (2008), "Bayesian Spatial Modeling of Housing Prices Subject to a Localized Externality." *Communications in Statistics–Theory and Methods*, 37, 2066-2078

Rui, C.[1] and **De Oliveira, V.** (2008), "Point and Block Prediction in Log–Gaussian Random Fields: The Non–constant Mean Case." *Journal of Statistical Planning and Inference*, 138, 2128-2142

De Oliveira, V. (2007), "Objective Bayesian Analysis of Spatial Data with Measurement Error." *The Canadian Journal of Statistics*, 35, 283-301

Ferreira, M.A.R. and **De Oliveira, V.** (2007), "Bayesian Reference Analysis for Gaussian Markov Random Fields." *Journal of Multivariate Analysis*, 98, 789-812

De Oliveira, V. (2006), "On Optimal Point and Block Prediction in Log–Gaussian Random Fields." *Scandinavian Journal of Statistics*, 33, 523-540

Paez, M.S., Gamerman, D. and **De Oliveira, V.** (2005), "Interpolation Performance of a Spatio–Temporal Model With Spatially Varying Coefficients: Application to PM_{10} Concentrations in Rio de Janeiro." *Environmental and Ecological Statistics*, 12, 169-193

De Oliveira, V. (2005), "Bayesian Inference and Prediction of Gaussian Random Fields Based on Censored Data." *Journal of Computational and Graphical Statistics*, 14, 95-115

De Oliveira, V. (2004), "A Simple Model for Spatial Rainfall Fields." *Stochastic Environmental Research and Risk Assessment*, 18, 131-140

De Oliveira, V. (2003), "A Note On the Correlation Structure of Transformed Gaussian Random Fields." *Australian and New Zealand Journal of Statistics*, 45, 353-366

De Oliveira, V., Fokianos, K. and Kedem, B. (2002), "Bayesian Transformed Gaussian Random Field: A Review" (invited paper). *Japanese Journal of Applied Statistics*, 31, 175-187

De Oliveira, V. and Ecker, M. (2002), "Bayesian Hot Spot Detection in the Presence of a Spatial Trend: Application to Total Nitrogen Concentration in the Chesapeake Bay." *Environmetrics*, 13, 85-101

Berger, J., **De Oliveira, V.** and Sansó, B. (2001), "Objective Bayesian Analysis of Spatially Correlated Data." *Journal of the American Statistical Association*, 96, 1361-1374
[Erratum: *Journal of the American Statistical Association*, 98, 2003, pp 779]

De Oliveira, V. (2000), "Bayesian Prediction of Clipped Gaussian Random Fields." *Computational Statistics and Data Analysis*, 34, 299-314

Holland, D., **De Oliveira, V.**, Cox, L. and Smith, R. (2000), "Estimation of Regional Trends in Sulfur Dioxide Over the Eastern United States." *Environmetrics*, 11, 373-393

De Oliveira, V., Kedem, B. and Short, D. (1997), "Bayesian Prediction of Transformed Gaussian Random Fields." *Journal of the American Statistical Association*, 92, 1422-1433

WORKING MANUSCRIPTS

De Oliveira, V. "Bayesian Analysis of a Multivariate Density Ratio Model." Technical Report

De Oliveira, V. "An Isotropic Covariance Function in $\mathbb{R}^3$ with Long–Range Dependence and Flexible Smoothness." In preparation

De Oliveira, V. "On the Existence of Maximum Likelihood Estimators in a Class of Conditional Autoregressive Models." In preparation

De Oliveira, V. "Computationally Efficient Bayesian Prediction in Gaussian Random Fields." In preparation

REVIEWS AND UNPUBLISHED MANUSCRIPTS

De Oliveira, V. and Kedem, B. (1995), Review of "Multivariate Geostatistics," by Hans Wackernagel, Springer–Verlag, Berlin. *SIAM Review*, 39, pp 340-341

Bindel, D., **De Oliveira, V.** and Kedem, B. (1997), "An Implementation of the Bayesian Transformed Gaussian Spatial Prediction Model," University of Maryland–College Park, Technical Report

INVITED PRESENTATIONS AT CONFERENCES AND WORKSHOPS

"Gaussian Copula Models for Geostatistical Count Data." Recent Advances in Spatial and Spatio–Temporal Modeling, College Park, Maryland, October 31, 2019

"Models for Geostatistical Binary Data: Properties and Connections." The 28th Annual Conference of The International Environmetrics Society, Guanajuato, México, July 16–21, 2018

"On the Correlation Structure of Gaussian Copula Models for Geostatistical Count Data." International Conference on Statistical Distributions and Applications, Niagara Falls, Canada, October 15–16, 2016

"On the Correlation Structure of Gaussian Copula Models for Geostatistical Count Data." Eighth International Workshop on Simulation, Vienna, Austria, September 21–25, 2015

"Hierarchical Poisson Models for Geostatistical Count Data: Properties, Fitting and Model Checking." Workshop on Spatial Statistics, College Station, Texas, January 29–31, 2015

"An Introduction to Geostatistics." Taller de Estadistica y Econometria Espacial, Monterrey, México, December 15–16, 2014

"Hierarchical Poisson Models for Spatial Count Data: Bayesian Fitting and Model Assessment." International Society for Bayesian Analysis World Meeting, ISBA 2014, Cancun, México, July 14–18, 2014

"Hierarchical Poisson Models for Spatial Count Data: A Closer Look." 23rd Annual Conference of The International Environmetrics Society, Hilton Hotel, Anchorage, Alaska, June 10–14, 2013

"Optimal Predictive Inference in Log–Gaussian Random Fields." 12th Annual Red Raider Mini-Symposium on 'Computational and Theoretical Challenges in Interdisciplinary Predictive Modeling Over Random Fields', Texas Tech University, Lubbock, Texas, October 26, 2012

"On Properties of Hierarchical Poisson Models for Spatial Count Data." ENVR Workshop 'Spatial Modeling and Inference for Environmental Science', North Carolina State University, Raleigh, North Carolina, October 4–6, 2012

"Geospatial Statistics." Third Annual QSE^3 IGERT Symposium, University of Florida, Gainesville, Florida, April 30–May 1, 2012

"Bayesian Model Selection in Spatial Lattice Models." The Fourth Erich L. Lehmann Symposium, Rice University, Houston, Texas, May 9–12, 2011

"Bayesian Default Analysis for Gaussian Random Fields". 'Frontiers of Statistical Decision Making and Bayesian Analysis: In Honor of James O. Berger', University of Texas at San Antonio, Texas, March 17–20, 2010

"Optimal Predictive Inference in Log–Gaussian Random Fields". 'Spatio-temporal Statistical Analysis: Theory and its Applications', Kyoto, Japan, November 19–21, 2009

"Environmental Mapping Using Random Fields". SACNAS National Conference: 'Improving the Human Condition: Challenges for Interdisciplinary Science', Dallas, Texas, October 15–18, 2009

"Optimal Predictive Inference in Log–Gaussian Random Fields". Symposium 'Advances in Statistics and Applied Probability: Unified Approaches', University of Maryland, College Park, Maryland, July 30–31, 2009

"Jeffreys Priors for CAR Models". International Indian Statistical Association Conference: 'Frontiers of Probability and Statistical Science', University of Connecticut, Storrs, Connecticut, May 22–25, 2008

"Objective Bayesian Analysis of Spatial Data with Measurement Error." 32nd Spring Lecture Series on the theme 'Spatial and Spatio–Temporal Statistics', Fayetteville, Arkansas, April 12–14, 2007

"On Optimal Point and Block Prediction in Log-Gaussian Random Fields." Conference of Texas Statisticians, Waco, Texas, March 30-31, 2007

"Bayesian Reference Analysis for Gaussian Markov Random Fields." International Symposium on Statistical Analysis of Spatio-Temporal Data, Tokyo, Japan, November 13–15, 2006

"On Optimal Point and Block Prediction in Log-Gaussian Random Fields." ENAR Spring Meeting, Tampa, Florida, March 26–29, 2006

"On Optimal Point and Block Prediction in Log-Gaussian Random Processes." International Conference on Statistics, Combinatorics, Mathematics and Applications, Auburn, Alabama, December 2–4, 2005

Discussion of the Talk: "Bayesian Kriging and Bayesian Network Design," by Richard L. Smith. The Fifth International Workshop on Objective Bayes Methodology, Branson, Missouri, June 4–9, 2005

"Bayesian Analysis for a Class of Gaussian Markov Random Fields." Joint Statistical Meetings, Toronto, Canada, August 8–12, 2004

"Bayesian Analysis for a Class of Gaussian Markov Random Fields." ISBA 2004, Viña del Mar, Chile, May 23–27, 2004

"Bayesian Inference and Prediction of Gaussian Random Fields Based on Censored Data." Fourth International Workshop on Objective Prior Methodology, Aussois, France, June 15–20, 2003

"Modeling, Inference and Prediction of Spatial Rainfall Fields." Summer Research Conference in Statistics: Statistics in Science, Natchez, Mississippi, June 2-5, 2002

"Bayesian Inference and Prediction in Random Fields." Short course delivered at Instituto de Matemáticas, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil, April 16–27, 2001

"Statistical Models For Environmental Data." Short course delivered at I Taller de Estadística Computacional, Universidad de Los Andes, Mérida, Venezuela, December 6–9, 1999

"Bayesian Analysis and Prediction in Spatial Processes." Short course delivered at $XIII$ Foro Nacional de Estadística, ITESM Campus Monterrey, Monterrey, México, October 5–9, 1998

"Bayesian Prediction of Gaussian Random Fields Based on Coarsened Data." Workshop on Bayesian Inference and Stochastic Processes, Royal Academy of Sciences, Madrid, Spain, June 5–6, 1998

"Bayesian Spatial Prediction in Skewed Random Fields." Environmental Mathematics session in the Winter Meeting of the Canadian Mathematics Society held in London, Ontario, Canada, December 7–9, 1996

CONTRIBUTED PRESENTATIONS AT CONFERENCES AND WORK-SHOPS

"A Non–Stationary Non–Gaussian Hedonic Spatial Model for House Selling Prices." Spatial Statistics 2019: Towards Spatial Data Science, Sitges, Spain, July 10–13, 2019

"Spatial Modeling of Rainfall Accumulated Over Short Periods of Time." Joint Statistical Meetings, Vancouver, Canada, July 29–August 2, 2018

"Geostatistical Binary Data: Models, Properties and Connections." Joint Statistical Meetings, Chicago, Illinois, July 31–August 4, 2016

"On the Correlation Structure of Gaussian Copula Models for Geostatistical Count Data." Eleventh GeoENV Conference, Lisbon, Portugal, July 6–8, 2016

"Prediction Intervals for Integrals of Some Types of Non–Gaussian Random Fields: A Semiparametric Bootstrap Approach." Joint Statistical Meetings, Seattle, Washington, August 8–13, 2015

"Prediction Intervals for Integrals of Random Fields." Joint Statistical Meetings, Boston, Massachusetts, August 2–7, 2014

"On Some Properties of GLMMs for Spatial Count Data." Joint Statistical Meetings, Miami Beach, Florida, July 30–August 4, 2011

"On Shortest Prediction Intervals in Log-Gaussian Random Fields." Joint Statistical Meetings, Washington D.C., August 1–6, 2009

"On Shortest Prediction Intervals in Log–Gaussian Random Fields." ENAR Spring Meeting, San Antonio, Texas, March 15–18, 2009

"Objective Bayesian Analysis of Spatial Data with Measurement Error." The Third Erich L. Lehmann Symposium, Rice University, Houston, Texas, May 16–19, 2007

"Objective Bayesian Analysis of Spatial Data with Measurement Error." Eighth Valencia Conference on Bayesian Statistics, Benidorm, Spain, June 2–6, 2006

"Bayesian Inference and Prediction of Gaussian Random Fields Based on Censored Data." Joint meeting TIES 2004/ACCURACY 2004, Portland, Maine, June 28–July 1, 2004

"Bayesian Inference and Prediction of Gaussian Random Fields Based on Censored Data." The Second Erich L. Lehmann Symposium, Rice University, Houston, Texas, May 19–22, 2004

"Bayesian Prediction of Gaussian Random Fields Based on Coarsened Data." Fifth World Congress of the Bernoulli Society for Probability and Mathematical Statistics

and 63$^{\text{th}}$ Annual Meeting of the Institute of Mathematical Statistics, Guanajuato, México, May 15–20, 2000

"Bayesian Hot Spot Detection in the Presence of a Spatial Trend." Second European Conference on Highly Structured Stochastic Systems, University of Pavia, Italy, September 14–18, 1999

"Bayesian Prediction of Clipped Gaussian Random Fields." Sixth Valencia Conference on Bayesian Statistics, Spain, May 31–June 4, 1998

"Bayesian Prediction of Clipped Gaussian Random Fields." Statistics for Correlated Data: Conference Marking the 50th Anniversary of the Department of Statistics at Iowa State University, Ames, Iowa, October 16–18, 1997

"Prediction in Binary Random Fields." Analysis of Spatial Stochastic Models session, Meeting # 920, American Mathematical Society, Eastern Section, College Park, Maryland, April 12–13, 1997

"Use of Area–Time Fractions in Spatio–Temporal Problems." Modelling Longitudinal and Spatially Correlated Data: Methods, Applications, and Future Directions, Nantucket, Massachusetts, October 15–18, 1996

"Bayesian Simultaneous Prediction of Rainfall Fields." 3rd SPRUCE International Conference on Statistical Aspects of Pollution: Assessment and Control, Mérida, México, December, 11–15 1995

INVITED COLLOQUIA

Universitat Jaume I, Spain, July 2019;
U.S. Census Bureau, July 2018; Oregon State University, January 2018;
CIMAT–México, May 2014 and May 2000; Iowa State University, April 2014;
Simón Bolívar University, May 2015, June 2012, July 2001 and November 1998;
Central University of Venezuela, June 2012 and April 1999;
University of Tokyo, November 2009; Keio University, November 2009;
The University of Texas at San Antonio, March 2017, November 2006 and February 2006; Texas A&M University, October 2009;
Wichita State University, September 2005; The Ohio State University, May 2003;
University of Maryland, November 2005 and April 2002;
University of Arkansas February, 2002 and February 2001;
University of Connecticut, February 2001; University of Missouri, February 2001;
Virginia Tech, January 2001; North Carolina State University, January 1998;
Duke University, November 1997

GRANT SUPPORT

Principal Investigator

National Science Foundation grant DMS–2014427 "Likelihood Based Inference for the Smoothness of Random Fields," (P.I.) 2020–2023 (Pending). $295,812

UTSA INTRA Seed Grant Program Award "Bayesian Analysis of a Multivariate Density Ratio Model," (P.I.), September 2018–August 2019. $5,000

UTSA INTRA Seed Grant Program Award "A Non–Stationary Non–Gaussian Hedonic Spatial Model for House Selling Prices," (P.I.), September 2015–August 2016. $5,000

National Science Foundation grant DMS–1208896 "Geostatistical Modeling of Spatial Discrete Data," (P.I.) 2012–2015. $149,990

College of Business (The University of Texas at San Antonio) Summer research grant: 2007–2010 and 2012–2013. $5,000 each year

National Science Foundation grant DMS–0505759 "Bayesian Analysis and Prediction of Gaussian Random Fields," (P.I.) 2005–2009. $122,078

National Security Agency grant for the conference "Spatial and Spatio-temporal Statistics," (P.I.) 2007. $14,900

Fulbright College of Arts and Sciences (University of Arkansas) Summer research stipend "Bayesian Analysis of Lattice Data," 2004. $5,000

Fulbright College of Arts and Sciences (University of Arkansas) research incentive grant "Bayesian Analysis of Spatial Econometric Models," 2003–2004. $2,000

Simón Bolívar University grant "Bayesian Prediction of Integrals of Random Fields," (P.I.) 2000–2001. $2,000

Co–Investigator

National Institutes of Health grant RHL121293A (R&R) "Geometric Surrogates for Clinical Management of Abdominal Aortic Aneurysms," (Co-I.), P.I. Ender Finol, 2015–2019. $1,787,053

Army STTR contract "Multi–Hit Performance of Small Arms Protective Armor," (Statistical Consultant), P.I. David Jungk at Transparent Armor Solutions, Lead POC, May–November 2015. $150,000

National Science Foundation grant HRD–0932339 "Integrating High Performance Computing in Research and Education for Simulation, Visualization and Real–Time Prediction," (Associate Member) 2009–2013. $5,000,000

TEACHING

The University of Texas at San Antonio

STA 1053–Basic Statistics (Spring 2011–2013, 2016, 2017, 2018; Fall 2011 [×2], 2019)

STA 2303–Applied Probability and Statistics for Engineers (Spring 2012, 2013, 2016, 2018; Fall 2012, 2013)

STA 3513–Probability and Statistics (Fall 2006; Spring 2007)

STA 3523–Mathematical Statistics (Fall 2007, 2008; Spring 2008, 2009, 2010)

STA 5503–Mathematical Statistics I (Fall 2006)

STA 5513–Mathematical Statistics II (Spring 2007, 2017)

STA 6023–Mathematical Methods in Statistics (Spring 2008, 2011; Fall 2009)

STA 6133–Simulation and Statistical Computing (Fall 2007, 2008, 2010, 2012, 2014, 2016–2018)

STA 6863–Spatial Statistics (Spring 2009, 2014, 2015, 2019; Fall 2017)

STA 7503–Advanced Inference I (Fall 2009, 2010, 2013, 2014, 2016, 2018, 2019)

STA 7513–Advanced Inference II (Spring 2010, 2014, 2015, 2019)

University of Arkansas

STAT 2303–Principles of Statistics (Fall 2002)

STAT 2023–Biostatistics (Spring 2002)

STAT 3013–Introduction to Probability and Statistics (Fall 2002; Spring 2003–2004)

STAT 4003–Statistical Methods (Fall 2003–2004)

STAT 5103–Theory of Statistics (Fall 2005)

STAT 5113–Statistical Inference (Spring 2006)

STAT 5313–Regression Analysis (Spring 2002, 2004–2005)

STAT 5383–Time Series Analysis (Fall 2003–2005)

STAT 5413–Spatial Statistics (Spring 2003, 2005)

STAT 610V–Research in Statistics (Spring 2005–2006)

Simón Bolívar University

CO 3131–Probability for Engineers (Fall 1998, 2000; Spring 1999)

CO 3321–Statistics for Engineers (Winter 1999, 2001; Spring 2000–2001)

CO 4311–Statistics for Quality Control and Productivity (Fall 1999; Winter 2000)

CO 6311–Statistical Inference I (Winter 2000)

CO 6312–Statistical Inference II (Spring 2000)

CO 6322–Spatial Statistics (Spring 1999)

GRADUATE STUDENT ADVISING

Chair

Henry Chacón (2021, expected), TBD. Ph.D. dissertation in Applied Statistics, UTSA (co–chair: Paul Rad)

Binbin Wang (2019), "Spatial Modeling of Rainfall Accumulated Over Short Periods of Time." Ph.D. dissertation in Applied Statistics, UTSA

Zifei Han (2017), "Gaussian Copula Models for Geostatistical Count Data." Ph.D. dissertation in Applied Statistics, UTSA

Bazoumana Kone (2014), "Block Prediction Intervals." Ph.D. dissertation in Applied Statistics, UTSA

Liang Jing (2011), "Bayesian Model Checking for Generalized Linear Spatial Models for Count Data." Ph.D. dissertation in Applied Statistics, UTSA

Changxiang Rui (2008), "Optimal Predictive Inference in Log–Gaussian Random Fields." Ph.D. dissertation in Statistics, University of Arkansas

Luz E. Rodríguez (2001), "Estimation in Gaussian Random Fields: Maximum Likelihood and Restricted Maximum Likelihood." M.S. thesis in Statistics, Simón Bolívar University

Member

Balaji Rengarajan (2021, expected), "On the Use of Neural Networks to Predict Rupture Potential for Abdominal Aortic Aneurysms." Ph.D. dissertation in Mechanical Engineering, UTSA

Alifer Bordones (2020, expected), "Right Ventricular Remodeling and Risk Stratification Assessment in Patients With Pulmonary Hypertension." Ph.D. dissertation in Biomedical Engineering, UTSA

Ali Khalajmehrabadi (2018), "Optimization Techniques for Robust Positioning, Timing, and Security." Ph.D. dissertation in Electrical Engineering, UTSA

Mirunalini Thirugnanasambandam (2018), "On the Use of Patient–Specific Tissue Mechanics for Abdominal Aortic Aneurysm Wall Stress Assessment." Ph.D. dissertation in Biomedical Engineering, UTSA

Shalin Parikh (2017), "Classification of Abdominal Aortic Aneurysms Based on Geometry Quantification Measures." M.S. thesis in Biomedical Engineering, UTSA

Kristopher Williams (2016), "Local Parametric Density–Based Outlier Detection and Ensemble Learning With Applications to Malware Detection." Ph.D. dissertation in Applied Statistics, UTSA

Sathyajeeth Chauhan (2016), "Geometric Surrogates of Wall Stress in Emergently Repaired Abdominal Aortic Aneurysms." M.S. thesis in Biomedical Engineering, UTSA

Carolina Quintana–Kuether (2016), "A Variance Reduction Sampling Method to Efficiently Estimate the Probability–of–Failure for Damage–Tolerant Structures." Ph.D. dissertation in Mechanical Engineering, UTSA

Aman Mahipat (2015), "Ex–vivo Biomechanical Characterization of Arteriovenous Fistulas." M.S. thesis in Biomedical Engineering, UTSA

Grant Huang (2014), "Assistance, Channel, and Networking Models for A–GPS Simulators, and Extensions." Ph.D. dissertation in Electrical Engineering, UTSA

Daniel Sparkman (2014), "Spatial Statistical Characterization and Simulation of Microtexture." Ph.D. dissertation in Mechanical Engineering, UTSA

Sergio Alejandro Montelongo (2013), "Mathematical Rendering of Trabecular Bone Microarchitecture Using Stochastic Geometry and Voronoi Tessellation Methods." M.S. thesis in Biomedical Engineering, UTSA

Daniel Polhamus (2011), "Bayesian Sequential Analysis for Correlated Time to Event Data: A Computational Approach." Ph.D. dissertation in Applied Statistics, UTSA

Carolina Dubinsky (2011), "Optimal Allocation of Testing Resources for Statistical Simulations." M.S. thesis in Mechanical Engineering, UTSA

John Joseph (2011), "Preliminaries to Water Instrumentation System Design." Ph.D. dissertation in Environmental Science and Engineering, UTSA

Daniel Sparkman (2010), "Critical Failure Location Identification With Stochastic Finite Elements." M.S. thesis in Mechanical Engineering, UTSA

Mohamadreza Hosseini (2009), "Statistical Models for Agroclimate Risk Analysis." Ph.D. dissertation in Statistics, The University of British Columbia (external examiner)

PROFESSION SERVICE

Associate Editor for *Environmental and Ecological Statistics*, 2014–present

Associate Editor for the *Journal of Statistical Distributions and Applications*, 2013–present

Member of Scientific Committee for *Colombian Journal of Statistics*, 2015–present

Member of the Awards Committee, American Statistical Association's Section on Statistics and the Environment, 2019–2022

Local committee member of the 28th Annual Conference of The International Environmetrics Society, Guanajuato, México, July 16–21, 2018

Vice–President of the San Antonio Chapter of the American Statistical Association, 2017–2018

Grant proposal reviewer for National Science Foundation, 2018 and 2009

Organizer of the topic invited session 'Copula Modeling of Discrete Dependent Data' in the 'International Conference on Statistical Distributions and Applications', Niagara Falls, Canada, October 14–16, 2016

Organizer of the topic invited session 'Recent Advances in Copula Modeling' in the 'Eighth International Workshop on Simulation', Vienna, Austria, September 21–25, 2015

National Science Foundation Panel Review Member on Statistics Proposals, 2014 and 2010

National Science Foundation Panel Review Member on Sustainability Research Network Preliminary Proposals, 2012

Organizer of the invited session 'Bayesian Methods and Applications ' in the 'The Fourth Erich L. Lehmann Symposium', Houston, May 9–12, 2011

Co–organizer of the Symposium: 'Advances in Statistics and Applied Probability–Unified Approaches', in honor of Benjamin Kedem, University of Maryland, College Park, July 30–31, 2009

Associate Editor for *International Journal of Ecological Economics & Statistics*, 2005–2009

Organizer of the 32nd Annual Spring Lecture Series in the Mathematical Sciences on the theme: 'Spatial and Spatio-Temporal Statistics', Fayetteville, Arkansas, April 12–14, 2007

Grant proposal reviewer for National Security Agency, 2007

Book reviewer for Springer–Verlag, 2006

REFEREEING

Annals of Applied Statistics (2), *Annals of the Institute of Statistical Mathematics, Bayesian Analysis* (2), *Biometrics* (5), *Colombian Journal of Statistics, Communications in Statistics–Simulation and Computation* (2), *Communications in Statistics–Theory and Methods, Computational Statistics & Data Analysis* (6), *Current Trends in Bayesian Methodology with Applications, Ecology, Ecology Letters, Electronic Journal of Statistics, Environmental and Ecological Statistics* (3), *Environmental Monitoring and Assessment, Environmetrics* (3), *Expert Systems With Applications, IEEE Transactions on Cybernetics, IEEE Transactions on Information Theory, International Journal of Health Geographics, Journal of Agricultural, Biological and Environmental Statistics* (3), *Journal of Biomechanical Engineering, Journal of Biopharmaceutical Statistics, Journal of Computational and Graphical Statistics* (3), *Journal of Environmental Management, Journal of Hydrology, Journal of Multivariate Analysis* (3), *Journal of Nonparametric Statistics, Journal of Statistical Computation and Simulation* (3), *Journal of Statistical Distributions and Applications, Journal of Statistical Planning and Inference* (4), *Journal of Statistical Software, Journal of Statistical Theory and Practice* (3), *Journal of the American Statistical Association* (3), *Mathematical Geology, North American Journal of Economics and Finance, PLOS ONE, Spatial Statistics* (5), *Statistical Modelling, Stat, Statistica Neerlandica, Statistical Science, Statistics* (2), *Statistics & Probability Letters, Stochastic Environmental Research & Risk Assessment* (2), *Technometrics* (2), *The Canadian Journal of Statistics, Water Resources Research*

UNIVERSITY SERVICE

The University of Texas at San Antonio

Department Ph.D. in Applied Statistics admissions committee, 2013–present

Department Graduate Programs committee, 2006–present

Department Ph.D. committee, 2006–present

College Strategic Squad for the Downtown Initiative committee, 2018–2019

College Research Grant Fund committee, 2015–2021

Department Statistics Seminar organizer, 2018–2019

Department Ph.D. in Applied Statistics self study committee, 2017–2018

University Assembly committee, 2016–2018

University Scholarship committee, 2016–2018

College Faculty Forum/Graduate Faculty Forum Executive committee, 2014–2016

Department Faculty search committee, 2015 and 2008

Department Peer Observation of Teaching committee, 2014

Department committee to recommend Publications and Conferences rankings in Statistics and Probability, 2013–2014

Department Affirmative Action Advocate for the Accounting department search committee, 2013–2014

University Faculty Advisory Panel for the Research Service Center for the Colleges of Liberal and Fine Arts, Business and Honors, 2013

University Parking Appeals Panel, 2012–2013

Department committee to designing a new department web page, 2012

University Evaluation committee member for UTSA CRSGP and TRAC Grant proposals, 2010–2012

University Evaluations, Merit, Rewards and Workload committee, 2009–2012

University Academic Freedom and Tenure committee, 2009–2012

College Summer Grants committee, 2008

College Ph.D./Research committee, 2007–2009

Department Master in Statistics self study committee, 2008

Department seminar organizer, 2006–2008

University of Arkansas

University committee to create Bioinformatics program, 2004–2005

Department Faculty search committee, 2003–2004

Department Master's exam committee, 2002–2006

Department Graduate committee, 2003–2006

Department Statistics seminar organizer, 2002 and 2005

Department Division of Statistics web person, 2003–2006

Simón Bolívar University

Statistics representative at Department council, 2000–2001

Department seminar organizer, 1999–2000

National Institute of Statistical Sciences

Statistics seminar organizer, 1998

PROFESSIONAL MEMBERSHIPS

American Statistical Association

International Statistical Institute

International Society for Bayesian Analysis