

Curriculum Vitae

NAME Lei Jin

CONTACT INFORMATION Department of Mathematics and Statistics
Texas A&M University -Corpus Christi
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EDUCATION Ph.D., Statistics, Texas A&M University, College Station, TX 08/2007
M.S., Applied Mathematics, Zhejiang University, Hangzhou, P.R. China 06/2001
B.S., Applied Mathematics, Huazhong University of Science and Technology,
Wuhan, P.R. China 06/1998

EXPERIENCE **Assocate Professor of Statistics,** 09/2018 - Present
Department of Mathematics & Statistics, Texas A&M University-Corpus Christi

Assistant Professor of Statistics, 08/2013 - 08/2018
Department of Mathematics & Statistics, Texas A&M University-Corpus Christi

Assistant Professor of Statistics, 01/2008 - 07/2013
Dept. of Mathematics, Computer Science and Statistics, McNeese State Univ.

Statistician, inVentiv Health 10/2007 - 01/2008

Research and Teaching Assistant, 09/2002 - 05/2007
Dept. of Statistics, Texas A&M Univ.

PAPERS **Refereed Publications**
Cai, L. and Jin, L. and Wang, S. (2020). Oracally efficient estimation and simultaneous inference in partially linear single-index models for longitudinal data. *Electronic Journal of Statistics*. 14: 2395-2438.
Xie, J., Garcia Carrillo, L. R. and Jin, L (2020). Path Planning for UAV to Cover Multiple Separated Convex Polygonal Regions, *IEEE Access*. 8:51770-51785
Jin, L., and Banerjee, K. (2020). Adaptive reweighted variance estimation for Monte Carlo eigenvalue simulations. *Nuclear science and engineering: the journal of the American Nuclear Society*. 194: 190-206.
Xie, J., Garcia Carrillo, L. R. and Jin, L , and Hespanha, J.P. (2019). A Robust State Estimator for Multi-Agent Systems Under Impulsive Noise and Missing Measurements, The 58th IEEE Conference on Decision and Control (CDC), Nice, France.
Jin, L., Cai, L. and Wang, S. (2019). A computational bootstrap procedure to compare two dependent time series. *Journal of Statistical Computation and Simulation*. 89: 2831-2847.
Huang, Y., Meyer. P., and Jin, L. (2019). Spatial access to health care and elderly ambulatory care sensitive hospitalizations. *Public Health*. 169, 76-83
Xie, J., Carrillo. L., and Jin, L. (2019). An integrated traveling salesman and coverage path planning problem for unmanned aircraft systems. *IEEE Control Systems Letters*,

- Huang, Y., Meyer, P., and Jin, L. (2018) Neighborhood socioeconomic characteristics, healthcare spatial access, and emergency department visits for ambulatory care sensitive conditions for elderly. *Preventive Medicine Reports*. 12, 101-105.
- Jin, L., and Banerjee, K. (2018). Spectral methods to improve variance estimation in Monte Carlo eigenvalue simulations. *Nuclear Science and Engineering*. 191: 248-261.
- Jin, L. (2018). A frequency domain test to check equality in spectral densities of multiple time series with unequal lengths. *Journal of Time Series Analysis*. 39: 618-633.
- Jin, L., Banerjee, K., Hamilton, S. and Davidson, G. (2017). Improving variance estimation in Monte Carlo eigenvalue simulations. *Annals of Nuclear Energy*. 110: 692-708.
- Jin, L., Banerjee, K., Hamilton, S. and Davidson, G. (2017). Variance estimation in Monte Carlo eigenvalue simulations using spectral analysis method. *Trans. Am. Nucl. Soc.* 116: 533-535.
- Jin, L., and Wang, S. (2016). A new test for checking the equality of the correlation structures of two time series. *Journal of Time Series Analysis*, 37: 355- 368.
- Jin, L., Wang, S. and Wang, H. (2015). A new non-parametric stationarity test of time series in the time domain. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, 77: 893- 922.
- Jin, L. (2015). Comparing autocorrelation structures of multiple time series via the maximum distance between two groups of time series. *Journal of Statistical Computation and Simulation*, 85: 3535 - 3548.
- Jin, L. (2011). A data-driven test to compare two or multiple time series. *Computational Statistics & Data Analysis*, 55: 2183-2196.
- Jin, L. and Wang, S. (2010). A model validation procedure when covariate data are missing at random. *Scandinavian Journal of Statistics*, 37, 403-421.
- Li, Z. and Jin, L. (2010). A Spectral Statistics Analysis For Machinery Vibration Diagnostics. Proceedings of the 17th International Congress of Sound and Vibration, Cairo, Egypt.
- Li, Z., Jin, L., Zhang, N. and Zhou, Y. (2009). Shaft crack detection using statistical analysis. *Proc. 2009 of International Mechanical Engineering Congress & Exposition*. 429 - 434
- Wang, S., Liang, H. and Jin, L. (2007). Estimation in partially linear models with missing data: A review. *Asymptotic Theory in Probability and Statistics with Applications*, 342-359, Higher Education Press, Beijing.
- Fan, R., Jung, J. and Jin, L. (2006). High resolution association mapping of quantitative trait loci, a population based approach. *Genetics*, 172, 663 - 686.
- Jung, J., Fan, R. and Jin, L. (2005). Association mapping of quantitative trait loci by multiple markers. *Genetics*, 170, 881-898.
- Fan, R. Z., C. Spinka, L. Jin and J. S. Jung, (2005) Pedigree linkage disequilibrium mapping of quantitative trait loci. *Eur. J. Hum. Genet.* 13, 216 -231.

GRANTS

- NOAA, NA19OAR0170354 CO-PI, 2019 - 2022
 Ocean Acidification on a Crossroad Enhanced Respiration, Upwelling, Increasing Atmospheric CO₂, and their interactions in the northwestern Gulf of Mexico
- Texas Research Development Fund Grant, PI, 2015 - 2016

Statistical Analysis of Physiological Data from the Respiratory System in Cetaceans
Louisiana BoR, NSF-PFUND-150, PI 2009 - 2010
Statistical models for mechanical malfunction detection and diagnosis based on vibration data.
Louisiana BoR, LA-DL-SELECT-55-08/09, CO-PI 2009 - 2010
Developing engineering and mathematics web-based courses.

SUMMER RESEARCH PROGRAM HBCU/MEI Faculty Summer Research Program, sponsored by Oak Ridge National Laboratory 2016

COURSES TAUGHT **Texas A&M - Corpus Christi:**

Statistics for life
Applied probability and statistics
Applied probability and statistics - blending version
Statistics for research I
Statistical linear models
Statistical modeling and data analysis
Statistical methods and data analysis

McNeese State University:

Elementary probability and statistical inference
Applied statistical methods
Mathematical Statistics and Probability I
Quality control
Online course: Elementary probability and statistical inference
Statistical methods
Analysis of variance
Linear models
Survey of statistical methods

Texas A&M - College Station

Elementary statistical inference

CONFERENCE PRESENTATIONS Jin, L, Variance Estimation for the Sample Mean of Dependent Data Stream, 2017 Joint Statistical Meetings, Baltimore, MD.
Lai, C, Jin, L. and Fahlman, Respiratory Disease Diagnosis for Dolphin Using the Breathing Data, 2017 Joint Statistical Meetings, Baltimore, MD.
Jin, L, Banerjee, K, Hamilton, S and Davidson, G. Variance Estimation in Monte Carlo Eigenvalue Simulations Using Spectral Analysis Method, 2017, ANS Meeting, San Francisco, CA
Jin, L, Wang S. A Nonparametric Bootstrap Test for Checking the Equality of the Correlation Structures of Two Correlated Time Series, 2016 Joint Statistical Meetings, Chicago, IL
Jin, L, Testing the Equality of Multiple Spectral Densities of Time Series in the Frequency

Domain, 2015 Joint Statistical Meetings, Seattle, WA

Huang, Y. , Meyer, P., Jin, L., The Association Between Preventable Hospitalizations and Spatial Accessibility to Health Care for Elderly in the Coastal Bend of Texas, American Association of Geography Annual Meeting, AAG, Chicago. April 24, 2015.

Jin, L, A Robust Time Series Classification Method for Vibration-Based Damage Detection, 2014 Joint Statistical Meetings, Boston, MA

Jin, L, Wang S., and Wang, H. A new stationarity test of time series in time domain, 2012 Joint Statistical Meetings, San Diego, DC

Jin, L, Statistical models for mechanical malfunction detection based on vibration data, 2009 Joint Statistical Meetings, Washington, DC

Jin, L, Wang S. Goodness-of-fit tests for generalized linear models with missing covariate data, 2007 Joint Statistical Meetings, Salt Lake City, UT

Jin, L, Wang S. Goodness-of-fit tests for linear models when some covariates are missing. 2006 Joint Statistical Meetings, Seattle, WA

REVIEWER FOR
JOURNALS &
OTHERS

Mathematical Reviews
Probability and Statistics Letters
The Journal of Agricultural, Biological, and Environmental Statistics
Journal of Nonparametric Statistics
Statistics and Computing
Soil Dynamics and Earthquake Engineering
Dynamics of Atmospheres and Oceans
Philippine Journal of Science
Journal of Business & Economic Statistics
Journal of Statistical Computation and Simulation

PROFESSIONAL
MEMBERSHIP

American Statistical Association

WORKSHOP
ATTENDED

Faculty Research Development Program, Texas A&M Corpus Christi, 09/2016 - 04/2017
New faculty support series, CFE, Texas A&M Corpus Christi 09/2013 - 05/2014
Best Practices for On-line Course Design, ODELT, Texas A&M Corpus Christi 09/2013 - 11/2013