Publications:

- Gupta, B. C., Guttman, I., Jayalath, K. P. (2020) "Statistics and probability with applications for engineers and scientists". John Wiley & Sons.

- Jayalath, K. P., Gunst, R. F., Meltzer, D. J (2021). "Spatial Characterization of the Large Rock Patterns in Blocks C, X, and Y", The Mountaineer Site: a Folsom Winter Camp in the Rockies, B.N. Andrews, D.J. Meltzer and M. Stiger, editors. University Press of Colorado, Louisville, CO.

- Eifert, E. P., Jayalath, K. P., Chhikara, R. (in press). "Survival Analysis for the Inverse Gaussian Distribution: Natural Conjugate and Jeffrey's Priors". Emerging Topic in Statistics and Biostatistics: Bayesian Inference and Computation in Reliability and Survival Analysis.

- Jayalath, K. P., & Turner, J. (2021). "*Analysis of Means (ANOM) Concepts and Computations*". Applications and Applied Mathematics: An International Journal (AAM) 16(1), 75-96.

- Jayalath, K. P. (2021). "*Fiducial Inferences on the Right Censored Birnbaum Saunders Data via Gibbs Sampler*", Stats 4(2), 385-399.

- Jayalath, K. P., & Ng, H. K. T. (2020). "*Analysis of Means (ANOM) Approach in Advanced Designs*". Applied Stochastic Models in Business and Industry, 36(3), 501-520.

- Jayalath, K. P., & Chhikara, R. (2020). "*Survival Analysis for the Inverse Gaussian Distribution with the Gibbs Sampler*". Journal of Applied Statistics.

- Jayalath, K. P., & Ng, H. K. T. (2018). "*Analysis of means approach for random factor analysis*". Journal of Applied Statistics, 45(8), 1426-1446.

- Jayalath, K. P. (2018). "*A machine learning approach to analyze ODI cricket predictors*". Journal of Sports Analytics, 4(1), 73-84.

- Jayalath, K. P., Ng, H. K. T., Manage, A. B., & Riggs, K. E. (2017). "*Improved tests for homogeneity of variances*". Communications in Statistics-Simulation and Computation, 46(9), 7423-7446.

- Jayalath, K. P., & Gunst, R. F. (2017). "*The maximum likelihood based intensity estimate for circular point processes*". Environmental and Ecological Statistics, 24(3), 449-468.

- Jayalath, K. P., Gunst, R. F., Meltzer, D. J. (2015). "*Spatial Point Pattern Identification of an Apparent Ice-Age House Structure*". Spatial Statistics, 14 (2015): 563-580.

- Jayalath, K. P., Gunst, R. F., Meltzer, D. J. (2014). "*An Application of Spatial Point Processes*". JSM Proceedings, Statistics in Imaging Section. Boston, MA: American Statistical Association. 2720-2731.

Presentations:

- Invited talk: "*A Bayesian Survival Analysis for the Inverse Gaussian Data*", International Conference on Statistical Distributions and Applications, ICOSDA 2019, Grand Rapids, MI.

- Presented research work: "*A Bayesian Approach for Survival Analysis with the Inverse Gaussian Data*", Conference of Texas Statisticians 2019, Lamar University, Beaumont, TX.

- Invited talk: "*A Graphical Test for Testing Random Effects*", Conference of Texas Statisticians 2017, Southern Methodist University, Dallas, TX.

- Invited talk: "*A Graphical Test for Testing Random Effects in Common Statistical Design*", International Conference on Statistical Distributions and Applications, ICOSDA 2016, Niagara Falls, Canada.

- Invited talk: "*Spatial point patterns in geometrical structures*", Conference of Texas Statisticians 2015, University of Texas, Austin, TX

- Presented research work: "*An Application of Spatial Point Processes*", Joint Statistical Meetings 2014.

- Guest Speaker: "*Geometrical Pattern Identification Using Bayesian Paradigm*", The College of Sciences and Mathematics & The R. W. Yeagy Colloquium 2014, Nacogdoches, TX.

- Guest Speaker: "*Spatial Statistics Applications*", Math Club Meeting, Stephen F Austin State University, 2014, Nacogdoches, TX.

- Presented research work: "*Spatial Point Processes in Pre-Historic House Structures*", Conference of Texas Statisticians 2013, Rice University, Houston, TX.

- Presented research work: "*Spatial Point Patterns*", Southern Methodist University Research Day 2012.

- Presented research work: "*Tests for the Homogeneity of Variances*", Conference of Texas Statisticians 2009, Sam Houston State University, Huntsville, TX

- Presented research work: "*Robust Tests for the Equality of Variances*", Annual meeting of MAA Texas region 2008, Tarleton State University, Stephenville, TX.