

JAYASINGHE MUDIYANSELAGE THILINI NAVODA JAYASINGHE

Department of Mathematics, University of Dayton, Collage Park, Dayton, Ohio, 45469

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RESEARCH INTERESTS

Regression Analysis, Data Analysis, Shape Analysis, Statistical Machine Learning

EDUCATION

Ph.D. in Mathematics, Concentration: Statistics 2017-2022

Texas Tech University, USA

Dissertation Topic: Fitting Regression Models Using the LINEX Loss Function: Properties and Applications

Advisor: Leif Ellingson, Ph.D.

MS in Statistics 2017-2019

Texas Tech University, USA

B.Sc. in Statistics (Special) 2010-2015

University of Kelaniya, Sri Lanka

Thesis Topic: Forecasting weekly demand and material cost of a daily newspaper in Sri Lanka.

Advisor: Rushan Abeygunawardena, Ph.D.

PROFESSIONAL EXPERIENCE

Assistant Professor August 2023- Present

Department of Mathematics, University of Dayton, USA

Adjunct Instructor August 2022 -May 2023

Department of Mathematics and Computer Science, Wittenberg University, USA

Graduate Part-time Instructor August 2018 - August 2022

Department of Mathematics and Statistics, Texas Tech University, USA

Teaching Assistant August 2017 - August 2018

Department of Mathematics and Statistics, Texas Tech University, USA

Quality Assurance Executive June 2016-May 2017

Wijeya Newspapers Ltd, Sri Lanka

Temporary Lecturer February 2016-June 2016

Universiy of Kelaniya, Sri Lanka

Teaching Assistant February 2015-February 2016

Universiy of Kelaniya, Sri Lanka

PROFESSIONAL DEVELOPMENTS

Project NExT fellow- Green 2023

FELLOWSHIPS/SCHOLARSHIPS

Texas Tech University, USA

Early Graduation Scholarship	Summer 2022
Helen DeVitt Jones Graduate Fellowship	Fall 2021 to Spring 2022
AT&T Chancellor's Graduate Fellowship	Fall 2017 to Spring 2021
Hildebrand Scholar	Summer 2021
Ben Duran Scholarship	2020
Ron Anderson Scholarship	2020
Fuller Math Scholarship	2020
TTU SIAM Scholarship	2020
Shelby Hildebrand Graduate Fellowship	2019
Patrick L. Odell Grad Scholarship	2019

REFEREED PUBLICATIONS

Jayasinghe, J.M.T., Ellingson, L., & Prematilake, C. (2021), Regression models using the LINEX loss to predict lower bounds for the number of points for approximating planar contour shapes, *Journal of Applied Statistics*.
DOI:10.1080/02664763.2021.1986685.

PAPERS IN PREPARATION

Jayasinghe, J.M.T., Ellingson, L., Some characteristics of regression models fitted using the LINEX loss function and an application.

Jayasinghe, J.M.T., Ellingson, L., Zhang, W., Basic SIR model fitting using LINEX loss function to reduce underestimation.

ONGOING RESEARCH

Fake review detection and classification on online shopping platform.

CONFERENCE PROCEEDINGS

Jayasinghe, J.M.T.N., & Abeygunawardana, R. A. B. (2015). Forecasting weekly material cost for a daily newspaper in Sri Lanka, *Proceedings of the 8th International Research Conference*, General Sir John Kotelawala Defence University, Sri Lanka.

Jayasinghe, J.M.T.N, & Abeygunawardana, R.A. B. (2016). Forecasting of weekly demand for a daily newspaper in Sri Lanka, *Proceedings of the 3rd Ruhunu International Science and Technology Conference*, Faculty of Science, University of Ruhuna, Sri Lanka.

COURSE PREPARATION

Instructor of record

Department of Mathematics, University of Dayton, USA

Fall 2023

MTH 207- Introduction to Statistics

MTH 367- Statistical Methods-I

Department of Mathematics and Computer Science, Wittenberg University, USA

DATA 227- Introductory Statistics
Fall 2022, Spring 2023

Department of Mathematics and Statistics, Texas Tech University, USA

MATH 2300-Statistical Methods
Fall 2018, Spring 2020, Spring 2021, Summer 2021, Fall 2021
MATH 1550-Pre-Calculus
Spring 2019
MATH 2345-Introductions to Statistics with Applications to Business
Summer 2019
MATH 3342-Mathematical Statistics for Engineers and Scientists
Fall 2019, Fall 2020

Temporary Lecturer

Department of Statistics and Computer Science, University of Kelaniya, Sri Lanka

STAT 11521 - Statistical Laboratory
Applications and Examples with MINITAB in 2016

CONFERENCE PRESENTATIONS

Joint Statistical Meetings 2021 August 8-12, 2021, Virtual.
Talk Title: Some characteristics of regression models fitted using the LINEX loss function.

8th International Research Conference August 27-28, 2015, General Sir John Kotelawala Defence University, Sri Lanka.
Talk Title: Forecasting weekly material cost for a daily newspaper in Sri Lanka.

3rd Ruhunu International Science and Technology Conference January 28, 2016, Faculty of Science, University of Ruhuna, Sri Lanka.
Talk Title: Forecasting of weekly demand for a daily Newspaper in Sri Lanka.

POSTER PRESENTATIONS

2021 Conference of Texas Statisticians October 9, 2021, Virtual.
Poster Presentation Title: LINEX regression models to predict minimum number of sampling points needed to approximate shapes of planar contours.

The Statistical Methods in Imaging Conference May 17-18, 2021, Virtual.
Poster Presentation Title: Predicting the minimum number of sampling points needed to approximate shapes of planar contours via LINEX regression models.

SEMINAR TALKS

Statistical Image Analysis Seminar, Texas Tech University April, 2021
Talk Title: Fitting regression models using the LINEX loss function: An application and simulation study

Statistical Image Analysis Seminar, Texas Tech University November, 2020
Talk Title: Predictions of lower bounds for approximating planar curves using linear regression with the LINEX loss function

WORKSHOPS AND CONFERENCES ATTENDED

Statistical in Imaging section April 16, 2021
Webinar Talk

Recent Advances in Statistical Analysis of Imaging Data Dec 04-05, 2020
ASA Section on Imaging and Florida State University Workshop, Virtual

NISS Academic Affiliate Meet-up - How to present your research Nov 30, 2020
Virtual

Joint Statistical Meetings 2020 August 02-06, 2020
Virtual

Scientific Computing Meets Machine Learning and Life Sciences October 7-9, 2019
Matador room in the student union building, Texas Tech University

VOLUNTEER EXPERIENCE

Served as a judge for 2021 Arts and Humanities Graduate Student Research Conference

MEMBERSHIPS

Society for Industrial and Applied Mathematics
Association for Women in Mathematics
American Statistical Association
American Mathematical Society
Institute of Applied Statistics, Sri Lanka
AWM Raiders-Texas Tech University, USA (2018-2022)
SIAM chapter-Texas Tech University, USA (2017-2022)
Sri Lankan Student Association, Texas Tech University, USA (2017-2022)