

Tahmidul Islam

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Education

- [2016-Present]
Ph.D. in Statistics
University of South Carolina
- [2014-2016]
M.S in Statistics, Biostatistics & Informatics
CGPA: 3.94
University of Dhaka
- [2010-2014]
B.S in Statistics, Biostatistics & Informatics
CGPA: 3.71
University of Dhaka

Statistical Computing

- R, SAS, stata, SPSS

Graduate Courses

- Probability theory I & II
- Mathematical Statistics I & II
- Data Analysis I & II
- Stochastic Processes
- Advanced Inference
- Nonparametric Inference
- Large Sample Theory
- Categorical Data Analysis
- Computing with R and SAS
- Linear Models
- Biostatistics
- Artificial Intelligence
- Statistical Consulting

Awards

- Outstanding Graduate Assistant Award 2018
- Outstanding First-Year Graduate Student Award 2017
- National Science and Technology Fellowship; Bangladesh Government

Areas of Interest

Functional data analysis, Machine learning, Gaussian Process, Mixed effect model, Time series

Projects

- Develop Bayesian framework for analyzing sparse and non-sparse functional data using Gaussian process
 - Smoothing and supervised classification for functional data
 - Develop approximation free for efficient computation for non-sparse (regular) functional data
 - Smoothing and classification of spinal bone mineral density measurement
 - Smoothing and classification of genes related to phases of yeast cell cycle from temporal gene expression data
 - Speech recognition: classifying phonemes from digitized speech
- Computationally efficient Gaussian process regression for data with replications
- Forecast electricity power load in Texas with TBATS model
- Predict breast cancer from digitized image of fine needle aspirate of breast mass
- Frailty and GLMM for analyzing under-5 mortality and child malnutrition in Bangladesh

Work Experience

- [2016 - Present]
 - Graduate Teaching Assistant, Department of Statistics University of South Carolina
 - Taught courses: STAT 201 (Elementary Statistics), STAT 509 (Statistics for Engineers)
- [Summer 2017]
 - Graduate Research Assistant: Department of Epidemiology and Biostatistics, University of South Carolina
 - Investigate association between small for gestation age and infant mortality using GAM
- [2016]
 - Statistical Officer, icddr,b, Bangladesh
 - Analyzing health surveillance system data

Publications/Conferences

- Islam, T., Chakraborty, P., Lynch, J., and Grego, J. (2019). Bayesian Smoothing and Classification of Sparse Functional Data Using Gaussian Process. Poster session (Bayesian Methods) at the JSM, Denver, CO
- Islam, T. (2019). Learning Images with Gaussian Process Regression and Application to Classification. Poster session (Machine Learning) at the ENAR, Philadelphia, PA
- Islam, T., Rabbani, M., and Bari, W. (2016). Analyzing child malnutrition in Bangladesh: Generalized linear mixed model approach. *Dhaka University Journal of Science*