

Kristyn Pantoja

Texas A&M University, Department of Statistics

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Education

Texas A&M University

PHD CANDIDATE, STATISTICS

College Station, Texas

Aug 2017 - May 2022 (expected)

- Scholarships & Awards: Ruth J. and Howard F. Newton Graduate Student Teaching Award (2019), Graduate Merit Scholarship (2017)

University of Pennsylvania

BA, MATHEMATICS (MINOR: PHILOSOPHY)

Philadelphia, Pennsylvania

Aug 2013 - May 2017

- Graduated *magna cum laude*

Experience

EMD Serono, Merck KgaA

PHARMACOMETRY INTERN

Billerica, MA (remote)

May 2020–Aug 2020

- Implemented a novel Bayesian experiment design for dose escalation in Phase I clinical trials in oncology using R and Stan
- Conducted simulation studies to compare the design method to rule-based and model-based designs
- Accepted for a poster session hosted by ASCPT

H-E-B

DATA SCIENCE INTERN

San Antonio, TX

May 2018–Aug 2018

- Implemented recommender system for complementary products using Siamese LSTM Neural Network using Python and Keras (with Tensorflow backend)
- Aggregated transactional data and created labels for model training data based on similarity measures using SQL
- Demonstrated viability of model for predicting complementary products

Projects

Supervised log-ratios regression

JING MA, DAVID JONES, KRISTYN PANTOJA

Oct 2020–Present

- Propose a microbiome-based prediction model that utilizes hierarchical clustering based on a novel distance measure to construct multi-resolution predictive signatures

Minimum energy designs for model selection

KRISTYN PANTOJA, DAVID JONES, RUI TUO, HUIYAN SANG

Feb 2019–Present

- Propose a Bayesian experiment design method for regression problems where model selection and model checking are of interest
- Apply the design method to linear models, Gaussian Process models, and the variable selection problem

Word vectors for variational autoencoding topic modeling

PATRICK DING, KRISTYN PANTOJA

Sep 2018–Jan 2019

- Investigated the benefits of combining word embeddings and autoencoding topic models
- Implemented variational autoencoding topic models using pytorch

Publications

Accepted

- M. Z. Li, K. Gopalakrishnan, K. Pantoja, H. Balakrishnan (2020). "Graph signal processing techniques for analyzing aviation disruptions." *Transportation Science*.

Published

- M. Z. Li, K. Gopalakrishnan, K. Pantoja, H. Balakrishnan (2019). "Spectral approach towards analyzing airport performance and disruptions." *Thirteenth Air Traffic Management Research and Development Seminar*. (Best Paper: Performance Analysis and Metrics)

Skills

Programming Languages

R – PYTHON – RCPP

Other

GIT – MARKDOWN – L^AT_EX – RSTUDIO – CLUSTER COMPUTING