Alireza Safariyan

Curriculum Vitae

DoB: 1983-02-11
Marital Status: Married
Military Service: Exemption

Contact

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📱 (+98)9145897757

📍 Tabriz , East Azerbaijan, Iran

Skills

R | Python | excel | RapidMiner

Minitab | SAS | Matlab

spss, Lisrel, Amos, SmartPLS

CODAP, Fathom, TinkerPlot

Language

English

Reading	★★★★☆
Writing	★★★★☆
Speaking	★★★★☆
Listening	★★★★☆

👤 Profile Summary

I have a clear, logical mind with a practical approach to problem-solving and a drive to see things through to completion. I have more than 10 years of experience in teaching and researching across multiple statistics sectors. I am eager to learn, I enjoy overcoming challenges. My brief experiences are: 1) Statistical analysis for social network data like Facebook, Twitter. 2) Image processing by deep learning algorithms such as detecting by segmentation, clustering, classifying the proposed objects, 3) Shrinkage and penalized estimation in censored data and ranked set sampling schemes. 4) Statistical machine Learning.

🎓 Education

PhD in Statistics
Branch: Statistical inference
Institute/University: Shahrud University of Technology
Shahrud, Semnan, Iran
2015 - 2019

PhD in Sabbatical
Branch: Statistical analysis
Institute/University: University of Manitoba
Winnipeg, Manitoba, Canada
2017 - 2018

Master in Statistics
Branch: Mathematical Statistics
Institute/University: Tabriz University
Tabriz , East Azerbaijan, Iran
2007 - 2010

Bachelor in Statistics
Branch: Statistics
Institute/University: Tabriz University
Tabriz , East Azerbaijan, Iran
2003 - 2006

🧰 Work Experience

Lecturer
University of Allameh Tabataba'e
Tehran, Iran
Since September 2021

Tasks and Achievements

- Regression, Mathematical statistics, Application of Statistics in Economic

Lecturer
Azad University of Tabriz

Tabriz , East Azerbaijan, Iran

Since September 2021

Tasks and Achievements

- Applied statistics for PhD students in business management

Resource Person
PISTAR International Training Program

Lahore , Pakistan

November 2019 - February 2020

Tasks and Achievements

- Workshop of Machine Learning by R

Lecturer
Shahrud University of Technology

Shahrud, Semnan, Iran

September 2016 - January 2020

Tasks and Achievements

- Specialized and general courses in statistics and other fields

Lecturer
University of Payame Noor

Tabriz , East Azerbaijan, Iran

November 2008 - March 2017

Tasks and Achievements

- Time series, Regression, Probability, Mathematical statistics, Experimental design, Nonparametric methods, Statistical quality control, Continues and discrete multivariate analysis, Introduction to R software and so on.

Statistician
government organization

Tabriz , East Azerbaijan, Iran

February 2013 - December 2015

Tasks and Achievements

- Census data analysis

Certificates

MSRT
Institute: English Language Testing (MCHE)

May 2017

TinkerPlots, Fathom, CODAP (CLI – Collaborative Learning Initiative)
Institute: PISTAR Online Workshop on CODAP by Dr. Daniel Frischemeier from Germany

September 2021

Machine Learning
Institute: Shahrood University of Technology by Ali Shojaie

September 2018

Quantile Regression
Institute: University of Allameh Tabataba'e by Dr. Mohammad Jafari Jozani

June 2017

Functional Data Analysis by Mehdi Madooliat
Institute: Tarbiyat Modarres University

October 2016

Fuzzy Statistics and probability
Institute: Shahrood university of Technology

April 2016

Data mining
Institute: PISTAR Online Workshop, resource person: dr. Pedro Campos from Portugal

January 2022

application of ggplot Package in R
Institute: Resource person: Dr. Saleha and Dr. Sharqa from Pakistan

🔍 Research

Book of An Introduction to WinBUGS
Publisher: Amazon

September 2022

Link: www.amazon.com/Introduction-WinBUGS-Software-Reza-Ghasemi/dp/B0BGSLWNLF/ref=sr_1_2?qid=1667118594&refinements=p_27%3AAlireza+Safariyan&s=books&sr=1-2&text=Alireza+Safariyan

Reza Ghasemi, Alireza Safariyan, Mohsen Yoosefi Nejad, Reza Arabi Belaghi ISBN-13 : 979-8355310004

Book of Network Sampling using R software
Publisher: Independently published

February 2022

Link: www.amazon.com/Network-Sampling-Using-R-Software-dp-B09SNV8VZG/dp/B09SNV8VZG/ref=mt_other?_encoding=UTF8&me=&qid=

Alireza Safariyan, Reza Ghasemi, Mohsen Yoosefi Nejad, Omed Hassan Ahmed, Mehdi Hosseinzadeh ISBN-13 : 979-8418108210

Adjusting for missing data in Survey Sampling Using Judgment Post-Stratification
Publisher: Lahore University of Pakistan

March 2022

Alireza Safariyan, Ahmad Mohammedi

Estimating Centrality Parameters Of Networks Using Innovative Network Sampling Approaches Based On Rank (to be submitted)
January 2022

Alireza Safariyan, Mohammad Jafari Jozani, Brad Johnson

The Impact of Measurement Error on the Extended EWMA Control Chart (Under review)
February 2022

Muhammad Jawad Mirza, Sharqa Hashmi, Mawora Thomas Mwakudisa, Alireza Safariyan, Saleha Naghmi Habibullah, Muhammad Noor-ul-Amin

MRI Analysis of Glioblastoma through Hybrid of k-means, SVM and Deep Learning (Submitted)
Publisher: Statistics in Medicine

January 2022

Reza Ghasemi, Alireza Safariyan, Mohsen Yoosefi Nejad

New and Efficient Estimators of Reliability Characteristics for a Family of Lifetime Distributions Under Progressive Censoring (Submitted)
Publisher: Statistical Papers

December 2021

Alireza Safariyan, Reza Arabi Belaghi, Ejaz Ahmed, Abdulkadir Hussein

Application of Statistical Machine Learning and Deep Learning in Diagnosis of COVID-19 through CT Images
Publisher: University of Guilan

December 2021

Link: csc.guilan.ac.ir

Safariyan, A., Ghasemi, R., International Conference on Soft Computing

The Reliability Characteristics Estimation for a Family of Lifetime Distributions under Progressive Censoring
Publisher: Journal of Computational Statistics and Modeling

Link: civilica.com/doc/1392878/

Safariyan, A. & Arabi Belaghi R.

Improved point and interval estimation of the stress–strength reliability based on ranked set sampling
Publisher: Statistics

2019

Link: doi.org/10.1080/02331888.2018.1547906

Safariyan, A., Arashi M. and Arabi Belaghi R.

Improved estimators for stress-strength reliability using record ranked set sampling scheme
Publisher: Communication in Statistics – Simulation and Computation

2019

Link: doi.org/10.1080/03610918.2018.1468451

Safariyan, A., Arashi M. and Arabi Belaghi R.

Reliability Analysis Using Ranked Set Sampling
Publisher: Springer

2019

Link: doi.org/10.1007/978-3-319-93351-1_56

Safariyan, A., Arashi M., Ahmed S. E. and Arabi Belaghi R., International Conference on Management Science and Engineering Management, Lecture Notes on Multidisciplinary Industrial Engineering, 711-722 Springer, Cham.

Estimation for the Reliability Characteristic of a Family of Lifetime Distributions under Progressive Censoring
Publisher: Shahrood University of Technology

2018

Safariyan, A., Arashi M. and Arabi Belaghi R., Iranian Statistics Conference, Iranian Statistical Society

Some Asymptotic Results on the Preliminary Test Estimator of Stress-Strength Reliability
Publisher: International Imam Khomeini University of Qazvin

2017

Safariyan, A., Arashi M. and Arabi Belaghi R., Seminar on Probability and Stochastic Processes

Improved Estimators of some Reliability Characteristics
Publisher: Shahrood University of Technology

September 2019

PHD Thesis, PhD Adviser: Dr. Mohammad Arashi

Testing for changes using permutations of U-statistics
Publisher: Tabriz University

February 2010

MSC Thesis, MSC Adviser: Dr. Hossein Jabbari Khamnee

Projects

MRI Analysis of Glioblastoma through Hybrid of k-means, SVM and Deep Learning
October 2021

Methylation of the O^{6}-methylguanine methyltransferase (MGMT) gene promoter is correlated with the effectiveness of the current standard of care in glioblastoma patients. In fact MGMT promoter methylation status confers an improved prognosis and treatment response in gliomas. In this study, a deep learning pipeline is designed for automatic prediction of MGMT status in 372 glioblastoma patients with contrast-enhanced with fluid-attenuated inversion recovery (FLAIR) images. The end-to-end pipeline completes both tumor segmentation and status classification. Here we use a hybrid algorithm including k-means, RCNN, and SVM to separate the tumor and CNN to determine the methylation status. The area under the curve of receiver operating characteristic (AUC) of status prediction of the test data in FLAIR images is 0.9902. Despite the high speed, the proposed algorithm is very accurate in detecting and separating tumors and predicts methylation status is very satisfactory. This can find molecular biomarkers from common medical images and further facilitate treatment planning.

Estimating Centrality Parameters of Networks Using Innovative Network Sampling Approaches on Facebook and google plus data
For: University of Manitoba, Canada

March 2019

We were able to develop necessary basic theoretical results associated with Forest-Fire sampling for estimating network parameters and investigate the suitability of judgment post-stratification and ranked set sampling designs in estimating network centrality measures. We then compared our results with commonly used methods in this context. Our preliminary investigation has revealed a few interesting projects for future research in this direction. For example, we hope that we will be able to develop a nonparametric model using spline method for estimating inclusion probabilities associated with Forest Fire sampling from a network. Thesis a very important problem and will help to develop more efficient design-based estimators of network parameters and opens the venue for further progress on network parameter estimation using rank-based sampling designs.

Graph-theoretic incidence pattern characterization of disjointed letters in Quranic data
For: Sharif University of Technology

January 2022

Quran is revered by more than a billion Muslim throughout the world as an authentic text of divine nature. As such, like any phenomenon in the universe, spatial arrangement of features and patterns are considered unique. In this study, spatial analysis of characters were conducted through a network approach for chapters containing disjointed letters (DL), chapters lacking them (NDL), and all of Quran (TOT). Different centrality measures extracted with emphasis on the ones more relevant to textual data, were compared with other features of chapters and verses. The results showed that centrality indices of diffusion (closeness), controlling (betweenness) and etc. were more robust in consistently characterizing and highlighting similarities and differences at the statistical significance levels of $p<0.05$. Distribution of data for these measures showed superiority of centralities in segregating data distributions. Higher correlations of $R2>0.70$ were observed between character frequencies and subgraph scores and betweenness centralities, characteristics showing lesser relevance.

Honors

Excellent rank in the PHD entrance exam
August 2015

Highest score in doctoral thesis
September 2019

📢 References

Mohammad Arashi

Associate Professor, Department of Statistics, Ferdowsi University of Mashhad, IRAN

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Reza Arabi Belaghi

Associate Professor of Mathematical Statistics, Department of Statistics, Faculty of Mathematical Sciences, The University of Tabriz, Tabriz, IRAN,

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Mohammad Jafari Jozani

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Davood Shahsavani

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davoodshah@yahoo.com

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