د. سانجيث باهارات سيرجان

أستاذ مساعد

العلوم الرياضية والفيزيائية ـ شعبة الإحصاء

كلية العلوم والآداب

جامعة نزوى، سلطنة عمان

هاتف: 25446200(968+)

محول: 918

البريد الإلكتروني: sanjith@unizwa.edu.om

موقع المكتب: 11G-25

يعمل في الجامعة: منذ 2009

الحالة الاجتماعية: ..

حصل على درجة الماجستير في الإحصاء من جامعة كيريلا في عام 2003، و حصل على درجة البكالوريوس في الرياضيات من جامعة كيريلا في عام 2001. أما اهتماماته البحثية تقع في مجال تحليل الانحدارات و التخمين.

Mr- Sanjith UoN CV (3).pdf

المؤهلات الأكاديمية

Ph.D، Manaonmaniam Sundaranar University، 2017

M.Sc. in Statistics، University of Kerala, India، 2003

أنشطة التدريس

Introduction to Statistics:، Definition & uses of statistics, sources of data, Measures of central tendency, Probability etc.and variation,

Statistics for Engineering: ، Basic concepts of probability and statistics for engineering, Standard discrete distributions, standard continuous distributions

Principles of Probability: ، Random experiments, random variables; counting theorems; axioms of probability; conditional probability and independence; standard discrete distribution, standard continuous distributions; bivariate distributions; moment generating function; central limit theorem

Sampling Techniques، Methods of data collection; sources of errors; Simple random sampling, Stratified random sampling; Systematic sampling. Cluster sampling

Statistics for Actuarial Science: ، Introduction to Life Insurance Products and Pricing Factors, Life Insurance, Life Annuities, Fully Continuous, Fully Discrete and Semi-Continuous Models of Benefit Premium, Benefit Reserves, Multiple Life Functions, Life Table and its applications

Computational Techniques in Statistics: ، Statistical software, import data, transform variable, and perform descriptive statistics, describes some commonly used Inferential statistics (estimation of different parameters, and hypothesis testing of means, variances, correlation coefficients, and simple linear and multiple regression and ANOVA models) and graphical display of output

Statistical Methods: ، Analysis of contingency tables, simple linear regression, and analysis of variance. A statistical software package for social sciences is used to analyze the data, calculating, estimating the models and running the tests.

Mathematical Statistics: ، Cumulative distributions, probability distributions, expectations, marginal, joint & conditional distributions, and special parametric families of univariate distributions. Expectation of functions of random variables. Cumulative distribution function technique, Distribution of order Statistics.

Regression Analysis: ، Simple Linear Regression: Fitting the model, partitioning total variability, inference on slope and intercept, regression through the origin, residuals. Multiple linear regression model.

Demographic and Health Care Statistics: ، Sources and uses of demographic statistics; mortality, fertility and related measures; life tables; population models, estimation and projections; incomplete data; types and sources of health care related data; role of medical records

Applied Statistics: ، Collecting and exploring data, inference concerning one, two and multivariate populations, simple and multiple linear regression, analysis of variance, some nonparametric methods

Statistical Inference I:، Exact distribution of the sample mean for some specific distribution, properties of point estimator and methods of finding estimator (such as MLE, MM, LSM, MVUE and Bayes method).

Statistical Inference II: ، Interval estimation, hypothesis testing using interval estimation. Nonrandomized test, critical region, randomized test, power function, simple hypothesis against simple hypothesis, Neyman-Person test, Composite hypothesis. Generalised Likelihood ratio test, and some theorems regarding testing of hypothesis.

Design and Analysis of Experiments I: ، Completely randomized, randomized block, factorial and Latin square experimental designs. Repeated measures models. Derivation of Mathematical models of each design and their properties. Analysis of covariance.

Operations Research: ، The nature of Operations research, Linear programming: Introduction, formulation of linear programming model. Some concepts of convex/concave and strictly convex/concave sets and functions. Graphical solutions and boundary points. Standard form, basic and basic feasible solutions. Simplex algorithm and method, computational problems, finding feasible solution, basis feasible solution, duality, transportation problems. Network Analysis.

Quality and Reliability: ، Statistical Process Control: Statistical process control, control charts for attributes economic design of control charts. Acceptance sampling Lot-by-Lot ,for attributes,by variables and other a,Reliability:design and reliability, productivity and reliability, types of data (complete, type-I censored data, type-II censored data)).

الأنشطة البحثية

الاهتمامات البحثية ـ

Regression Analysis

Applied statistics

Experimental design

Probability theory

Estimation and Testing

Statistical quality control.

Reliability analysis and life testing

Time series analysis

ــ العرض في المؤتمرات

1. ``A Regularized Modeling Approach for Improving Predictive Accuracy for Skewed Distributions``، INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN MATHEMATICS & ITS EVOLUTION IN ENGINEERING(ICRAMEE2025)، MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY, INDIA، 06/12/2025

2. "The Significance Analysis of Robust and Quantile Regressors in Partially Skewed Distributions" using Agricultural and Climate Variables"، International Conference on Energy and Sustainability (ICES 2024),، A'Sharqiyah University, Oman، 22/04/2024

3. ``A Significant Study on Huber Loss Robust and Quantile Regression Models for Skewed Distributions``، 4th INTERNATIONAL CONFERENCE ON INFORMATION TECHNOLOGY,ADAPTIVE INTELLIGENCE: EVOLVE YOUR WORLD,, Springer، Amity University, Uttar Pradesh، 06/03/2024

ــ المنشورات

مقال:

1. 2025 ``How to Develop Comprehensive Explanatory and Confirmatory Techniques for the Characteristics of Global Climate Data? Insights from Six Stations of Humidity Data for the Period 1981 to 2022``، Al-Hemyari, Z. A., Al Amiri, I. S., Nair, S. B., & Al Abbasi, J. N., SAGE Open, 15(3), https://doi.org/10.1177/21582440251368939

2. 2025 ``Climate modeling for South Asia: statistical and deep learning for rainfall and temperature prediction``، Mishra, P., Ray, S., Lal, P., Nair, S. B., Matuka, A., Tashkandy, Y., & Emam, W., Scientific Reports, 15(1), 38235. https://doi.org/10.1038/s41598-025-22149-1

3. 2024 ``Linear and nonlinear investigations of the impact of chemical reaction on the thermohaline convection in a permeable layer saturated with Casson fluid``، Yadav, D., Nair, S. B., Awasthi, M. K., Ragoju, R., & Bhattacharyya, K. ; Physics of Fluids, 36(1). DOI: 10.1063/5.0187286

4. 2024 ``Instability analysis of swirling cylindrical Rivlin–Ericksen viscoelastic fluid–viscous fluid interface with heat and mass transfer``، Srija, R., Singh, A. K., Awasthi, M. K., Yadav, D., & Nair, S. B.; International Journal of Modern Physics B, 2450416. DOI: 10.1142/S0217979224504162

5. 2024 ``The effect of Péclet number on the onset of Casson fluid convective motion in a porous layer: Analytical and numerical investigations``، Mohamad, A. M., Yadav, D., Bharatharajan Nair, S., Awasthi, M. K., Ravi, R., & Bhattacharyya, K. ; Numerical Heat Transfer, Part B: Fundamentals, 1-13. DOI: 10.1080/10407790.2024.2320720

6. 2024 ``A Significant Study on Huber Loss Robust and Quantile Regression Models for Skewed Distributions``، Nair, S. B., Yadav, D., & Kumar, N.; International Conference on Information Technology (pp. 149-157).Springer Nature.

7. 2024 ``On Huber`s Robust Technique and Quantile Regression Models for the Total Production of Field Crops in Oman`` ، Sanjith Bharatharajan Nair , Zuhair A. Al-Hemyari; Universal Journal of Agricultural Research, Vol. 12, No. 2, pp. 429 - 444, 2024. DOI: 10.13189/ujar.2024.120221.

8. 2024 ``Analyzing Survival Outcomes of COVID-19 Patients: A Cox Regression Approach with Schoenfeld Residual Diagnostics``، Nair, S. B., & Yadav, D.; Infection Epidemiology and Microbiology, 10(2), 123-139. https://doi.org/10.52547/iem.10.2.123

9. 2024 ``Decidable Regression Techniques for Statistical Modelling with Sustainable Agriculture Operations.``، Nair, S. B., Al-Hemyari, Z. A., & Gountia, D., SN Computer Science, Springer, 5(8), 1159., https://doi.org/10.1007/s42979-024-03518-5

10. 2023 ``Statistical Modelling of the Agriculture Variables using Various Regression Techniques``، Nair, S.B. Al-Hemyari, Z.A., Kumar, N.; Tuijin Jishu/Journal of Propulsion Technology,44 (4), 5939-5954, DOI: 10.52783/tjjpt.v44.i4.2028

الجوائز والتقدير

2025 ; Certificate of Appreciation for conducting SPSS Workshop on " STATISTICAL ANALYSIS OF FINAL EXAM ITEMS", The Foundation Institute (Fi) in Collaboration with The College of Arts and Science (CAS), University of Nizwa, Feb 2025

2025 ;CERTIFICATE OF APPRECIATION IN THE FIELD OF ACADEMIC AND EDUCATIONAL`` EXCELLENCE`` , Awarded by University of Nizwa, Feb 2025

[Mr- Sanjith UoN CV (3).pdf](Mr-%20Sanjith%20UoN%20CV%20(3).pdf)

المرجع: https://www.unizwa.edu.om/staff/cas/sanjith