

**LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : JURNAL INTERNASIONAL**

Judul Jurnal Ilmiah (Artikel) : **Modeling cayenne production data in Central Java using adaptive neuro fuzzy inference system (ANFIS)**

Nama/ Jumlah Penulis : **Tarno**, Suparti, Dwi Ispriyanti

Status Pengusul : Penulis ke-1, corresponding author

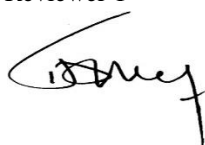
Identitas Jurnal Ilmiah : a. Nama Jurnal : Model Assisted Statistics and Applications
 b. Nomor ISSN : 15741699
 c. Vol, No., Bln Thn : vol. 13, no. 1, pp. 45-52, 2018
 d. Penerbit : IOS Press
 e. DOI artikel (jika ada) :
 f. Alamat web penerbit : <https://content.iospress.com/articles/model-assisted-statistics-and-applications/mas416>
 g. Terindex : Scopus, Q4, SJR 0.184

Kategori Publikasi Jurnal Ilmiah : Jurnal Ilmiah Internasional Bereputasi
 (beri \checkmark pada kategori yang tepat) Jurnal Ilmiah Internasional Terindek Basis Data
 Jurnal Ilmiah Internasional Terindek Basis di luar kategori 2

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Reviewer		Nilai Rata-Rata
	Reviewer 1	Reviewer 2	
a. Kelengkapan unsur isi jurnal (10%)	3,8	3,8	3,8
b. Ruang lingkup dan kedalaman pembahasan (30%)	11,4	11,4	11,4
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	11,5	11,5	11,5
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	11,3	11,5	11,4
Total = (100%)	38,0	38,2	38,1
Nilai Pengusul = 60% × 38,1 = 22,86			

Semarang,
Reviewer 1



Prof. Dr. Widowati, S.Si., M.Si
 NIP. 196902141994032002
 Unit Kerja: FSM UNDIP
 Bidang Ilmu: Matematika

Reviewer 2

Nama : Prof. Dr. Sunarsih, M.Si
 NIP. 195809011986032002
 Unit Kerja : FSM Undip
 Bidang Ilmu: Matematika

LEMBAR
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Hasil Penilaian *Peer Review* :

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a. Kelengkapan unsur isi jurnal (10%)	4			3,8
b. Ruang lingkup dan kedalaman pembahasan (30%)	12			11,4
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12			11,5
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	12			11,3
Total = (100%)	40			38,0
Nilai Pengusul = 60% × 38,0 = 22,8				

Catatan Penilaian artikel oleh Reviewer :

1. **Kesesuaian dan kelengkapan unsur isi jurnal:**

Konten jurnal sudah lengkap sesuai dengan ketentuan yang berlaku.

2. **Ruang lingkup dan kedalaman pembahasan:**

Model Assisted Statistics artinya sebuah pengembangan dari inferensi dan analisis dengan menerapkan informasi terkait, teori/konsep yang sesuai, atau model rancangan. Substansi artikel sesuai dengan ruang lingkup jurnal (*sampling theory, econometrics, time-series, design of experiments, and multivariate analysis*). Kedalaman pembahasan cukup baik (sebagian besar rujukannya dilibatkan dalam proses pembahasan hasil). Artikel yang dipublikasikan membahas tentang pemodelan data runtun waktu dengan pendekatan soft computing.

3. **Kecukupan dan kemutakhiran data/informasi dan metodologi :**

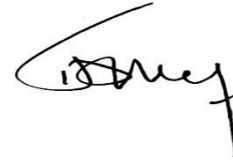
Dalam studi tersebut, telah diperoleh sekumpulan informasi yang didukung oleh metodologi yang tepat dan didukung oleh referensi yang terbaru, yaitu kurang dari 5 tahun yang lalu.

4. **Kelengkapan unsur dan kualitas terbitan:**

Jurnal ini tergolong J. Internasional Bereputasi (Editorial board lebih dari 4 negara, Kontributor lebih dari 2 negara, ISSN: 15741699, terindeks di scopus/SJR=0,184 (2017)/Q4; proses editorial yang cukup sempurna).

Artikel tidak terindikasi plagiasi, dengan hasil similarity index 11%, dan sesuai bidang ilmu pengusul (penulis pertama) yaitu bidang statistika terapan khususnya time series analysis.

Semarang, April 2023
Reviewer 1



Prof. Dr. Widowati, S.Si., M.Si
NIP. 196902141994032002
Unit Kerja: FSM UNDIP
Bidang Ilmu: Matematika

**LEMBAR
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(beri \checkmark pada kategori yang tepat)

Jurnal Ilmiah Internasional Terindek Basis Data

Jurnal Ilmiah Internasional Terindek Basis di luar kategori 2

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b. Ruang lingkup dan kedalaman pembahasan (30%)	12			11,4
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12			11,5
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	12			11,5
Total = (100%)	40			38,2
Nilai Pengusul = 60% × 38,2 = 22,92				

Catatan Penilaian artikel oleh Reviewer :

1. **Kesesuaian dan kelengkapan unsur isi jurnal:**

Konten jurnal sudah lengkap sesuai dengan ketentuan yang berlaku.

2. **Ruang lingkup dan kedalaman pembahasan:**

Model Assisted Statistics artinya sebuah pengembangan dari inferensi dan analisis dengan menerapkan informasi terkait, teori/konsep yang sesuai, atau model rancangan. Substansi artikel sesuai dengan ruang lingkup jurnal (*sampling theory, econometrics, time-series, design of experiments, and multivariate analysis*). Kedalaman pembahasan cukup baik (sebagian besar rujukannya dilibatkan dalam proses pembahasan hasil).

3. **Kecukupan dan kemutakhiran data/informasi dan metodologi :**

Dalam studi tersebut, telah diperoleh sekumpulan informasi yang didukung oleh metodologi yang tepat dan didukung oleh referensi yang terbaru, yaitu kurang dari 5 tahun yang lalu.

4. **Kelengkapan unsur dan kualitas terbitan:**

Jurnal ini tergolong J. Internasional Bereputasi (Editorial board lebih dari 4 negara, Kontributor lebih dari 2 negara, ISSN: 15741699, terindeks di scopus/SJR=0,184 (2017)/Q4; proses editorial yang cukup sempurna).

Artikel tidak terindikasi plagiasi, dengan hasil similarity index 11%, dan sesuai bidang ilmu pengusul (penulis pertama).

Semarang, April 2023
Reviewer 2

Nama : Prof. Dr. Sunarsih, M.Si
NIP : 195809011986032002
Unit Kerja : FSM Undip
Bidang Ilmu: Matematika

LEMBAR PERNYATAAN BEBAS PELANGGARAN ILMIAH

Yang bertanda tangan di bawah ini

Nama : Dr. Tarno. M.Si
NIP : 196307061991021001
NIDN : 0006076305
Pangkat (golongan ruang) : Pembina / IVa
Jabatan Akademik : Lektor Kepala
Program Studi : Statistika
Fakultas/Sekolah : Fakultas Sains dan Matematika

menyatakan bahwa karya ilmiah dengan judul:

“Modeling cayenne production data in Central Java using adaptive neuro fuzzy inference system (ANFIS)”

yang dipublikasikan pada:

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Demikian surat pernyataan ini kami buat untuk dipergunakan sebagaimana mestinya.

Semarang, 1 April 2023

Yang Menyatakan



Dr. Tarno, M.Si
NIP. 196307061991021001



Source details

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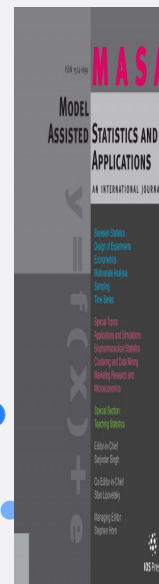
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Authors: [Singh, Sarjinder](https://content.iospress.com:443/search?q=author%3A%28%22Singh%2C+Sarjinder%22%29) (<https://content.iospress.com:443/search?q=author%3A%28%22Singh%2C+Sarjinder%22%29>)

Article Type: Research Article

DOI: 10.3233/MAS-180421

Citation: [Model Assisted Statistics and Applications](https://content.iospress.com:443/journals/model-assisted-statistics-and-applications) (<https://content.iospress.com:443/journals/model-assisted-statistics-and-applications>), vol. 13, no. 1, pp. 1-3, 2018

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[District level poverty estimation for rural Odisha \(India\) using different estimation techniques](https://content.iospress.com:443/articles/model-assisted-statistics-and-applications/mas414) (<https://content.iospress.com:443/articles/model-assisted-statistics-and-applications/mas414>)

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(<https://content.iospress.com:443/articles/model-assisted-statistics-and-applications/mas416>).

Authors: [Tarno, Tarno](https://content.iospress.com:443/search?q=author%3A%28%22Tarno%2C+Tarno%22%29) (<https://content.iospress.com:443/search?q=author%3A%28%22Tarno%2C+Tarno%22%29>) | [Suparti, Suparti](https://content.iospress.com:443/search?q=author%3A%28%22Suparti%2C+Suparti%22%29) (<https://content.iospress.com:443/search?q=author%3A%28%22Suparti%2C+Suparti%22%29>) | [Ispriyanti, Dwi](https://content.iospress.com:443/search?q=author%3A%28%22Ispriyanti%2C+Dwi%22%29) (<https://content.iospress.com:443/search?q=author%3A%28%22Ispriyanti%2C+Dwi%22%29>).

Article Type: Research Article

Abstract: The aim of this research is to develop the novel procedure of Adaptive Neuro-Fuzzy Inference System (ANFIS) modeling for forecasting time series data. The procedure development applies statistical inference based on Lagrange Multiplier (LM) test for selecting input variables, determining the number of clusters, and generating the rule-bases. For selecting inputs, several lags which are indicated significantly different to zero are divided into 2 clusters (minimum number of clusters), and then the lags are selected as optimal inputs of ANFIS based on LM test procedure. The cluster numbers of optimal inputs are added using LM-test procedure such optimal clusters are ... [Show more](#)

Keywords: Time series, cayenne production, forecasting, ARIMA, ANFIS, LM-test

DOI: 10.3233/MAS-170416

Citation: [Model Assisted Statistics and Applications](https://content.iospress.com:443/journals/model-assisted-statistics-and-applications) (<https://content.iospress.com:443/journals/model-assisted-statistics-and-applications>), vol. 13, no. 1, pp. 45-52, 2018

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Authors: [Pal, Sanghamitra](https://content.iospress.com:443/search?q=author%3A%28%22Pal%2C+Sanghamitra%22%29) (<https://content.iospress.com:443/search?q=author%3A%28%22Pal%2C+Sanghamitra%22%29>) | [Chaudhuri, Arijit](https://content.iospress.com:443/search?q=author%3A%28%22Chaudhuri%2C+Arijit%22%29) (<https://content.iospress.com:443/search?q=author%3A%28%22Chaudhuri%2C+Arijit%22%29>).

Article Type: Research Article

Abstract: In order to estimate the proportion of people bearing a sensitive characteristic in a community, a sample is selected with unequal probabilities and randomized response data are obtained. Supposing data on a related variable are at hand in addition a model-design based estimation procedure modifying Chaudhuri and Saha's (2004) is developed and studied. Four well-known Randomized Response (RR) methods are illustrated and a one-parameter logistic regression model is tried. Empirical Bayes estimation is examined and simulated results are presented to study the resulting efficacy.

Keywords: Empirical Bayes, one parameter logistic, qualitative characteristic, stigmatizing features, Warner's and other RR models AMS Subject Classification: 62 DO5

STAT-HAWKERS at the JSM-2017, Baltimore, Maryland, USA

Article type: Research Article

Authors: [Singh, Sarjinder](https://content.iospress.com:443/search?q=author%3A%28%22Singh,Sarjinder%22%29) (<https://content.iospress.com:443/search?q=author%3A%28%22Singh,Sarjinder%22%29>)

Affiliations: Department of Mathematics, Texas A and M University-Kingsville, Kingsville, TX 78363, USA | E-mail: sarjinder@yahoo.com (<mailto:sarjinder@yahoo.com>)

DOI: 10.3233/MAS-180421

Journal: [Model Assisted Statistics and Applications](https://content.iospress.com:443/journals/model-assisted-statistics-and-applications) (<https://content.iospress.com:443/journals/model-assisted-statistics-and-applications>), vol. 13, no. 1, pp. 1-3, 2018

Published: 5 February 2018

Price: EUR 27.50

District level poverty estimation for rural Odisha (India) using different estimation techniques

Article type: Research Article

Authors: [Mohanty, Bigyanananda](https://content.iospress.com:443/search?q=author%3A%28%22Mohanty, Bigyanananda%22%29) (<https://content.iospress.com:443/search?q=author%3A%28%22Mohanty, Bigyanananda%22%29>)^a; ^{*} | [Swain, A.K.P.C.](https://content.iospress.com:443/search?q=author%3A%28%22Swain, A.K.P.C.%22%29) (<https://content.iospress.com:443/search?q=author%3A%28%22Swain, A.K.P.C.%22%29>)^b

Affiliations: [a] Surya Nagar, Bhubaneswar, Odisha, India | [b] IRC Village, Bhubaneswar, Odisha, **India**

Correspondence: [*] Corresponding author: Bigyanananda Mohanty, Plot No. 35, Surya Nagar, Bhubaneswar 751003, Odisha, India. Tel.: +91 098 61257270; E-mail: bigyanmohanty65@yahoo.com. (<mailto:bigyanmohanty65@yahoo.com>.)

Abstract: This paper examines the extent of poverty in different districts (small domains) of the State of Odisha, India using direct, synthetic, composite, and model based small area estimation techniques. The district level poverty estimates are based on data collected during the 68th round survey (2011–12) of the National Sample Survey Office (NSSO) and 2011 Population Census of India. It is shown that the model-based district level estimates are reasonably more reliable compared to other methods under comparison as confirmed by the diagnostic procedures.

Keywords: Poverty line, NSSO, household consumer expenditure survey, population census, and small area estimation

DOI: 10.3233/MAS-170414

Journal: [Model Assisted Statistics and Applications](https://content.iospress.com:443/journals/model-assisted-statistics-and-applications) (<https://content.iospress.com:443/journals/model-assisted-statistics-and-applications>), vol. 13, no. 1, pp. 5-17, 2018

Published: 5 February 2018

Price: EUR 27.50

An assessment of predictive performance of Zellner's g-priors in Bayesian model averaging

Article type: Research Article

Authors: [Ogundeji, Rotimi](https://content.iospress.com:443/search?q=author%3A%28%22Ogundeji, Rotimi%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Ogundeji, Rotimi%22%29)^{a, *} | [Adeleke, Ismaila](https://content.iospress.com:443/search?q=author%3A%28%22Adeleke, Ismaila%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Adeleke, Ismaila%22%29)^b | [Okafor, Ray](https://content.iospress.com:443/search?q=author%3A%28%22Okafor, Ray%22%29) (https://content.iospress.com:443/search?q=author%3A%28%22Okafor, Ray%22%29)^a

Affiliations: [a] Department of Mathematics, University of Lagos, Nigeria | [b] Department of Actuarial Science and Insurance, University of Lagos, **Nigeria**

Correspondence: [*] Corresponding author: R.K. Ogundeji, Department of Mathematics, University of Lagos, Nigeria. E-mail: rogundeji@unilag.edu.ng. (<mailto:rogundeji@unilag.edu.ng>)

Abstract: When making predictions and inferences, data analysts are often faced with the challenge of selecting the best model among competing models as a result of large number of regressors that cumulate into large model space. Bayesian model averaging (BMA) is a technique designed to help account for uncertainty inherent in model selection process. In Bayesian analysis, issues of the choice of prior distribution have been quite delicate in data analysis and posterior model probabilities (PMP) in the context of model uncertainty under model selection process are typically sensitive to the specification of prior distribution. This research identified a set of eleven candidate default priors (Zellner's g-priors) prominent in literature and applicable in Bayesian model averaging. A new robust g-prior specification for regression coefficients in Bayesian Model Averaging is investigated and its predictive performance assessed along with other g-prior structures in literature. The predictive abilities of these g-prior structures are assessed using log predictive scores (LPS) and log maximum likelihood (LML). The sensitivity of posterior results to the choice of these g-prior structures was demonstrated using simulated data and real-life data. The simulated data obtained from multivariate normal distribution were first used to demonstrate the predictive performance of the g-prior structures and later contaminated for the same purpose. Similarly for the same purpose, the real life data were normalized before using the data as obtained. Empirical findings reveal that under different conditions, the new g-prior structure exhibited robust, equally competitive and consistent predictive ability when compared with identified g-prior structures from the literature. The new g-prior offers a sound, fully Bayesian approach that features the virtues of prior input and predictive gains that minimise the risk of misspecification.

Keywords: Zellner's g-priors, Bayesian model averaging, model uncertainty, large model space, posterior model probability, predictive performance

DOI: 10.3233/MAS-170418

Journal: [Model Assisted Statistics and Applications](https://content.iospress.com:443/journals/model-assisted-statistics-and-applications) (https://content.iospress.com:443/journals/model-assisted-statistics-and-applications), vol. 13, no. 1, pp. 63-71, 2018

Published: 6 February 2018

Price: EUR 27.50

Predicting wine types with different classification techniques

Article type: Research Article

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Abstract: In modern world, wine has become a part and pencil of life and culture. With the improvement of production techniques, wine making has been turned into as a form of art and a branch of science. Italian wine is very popular because of its variation in taste. The taste of wine depends on different types of cultivars. This paper attempts to classify the cultivars on the basis of different chemical constituents recorded as wine data. To accomplish this task, we used linear discriminant analysis (LDA), multinomial logistic regression (MLR), random forest (RF) and support vector machine (SVM) classification techniques. We have analyzed these in the absence of outliers and in the presence of different rate of outliers. In both of the cases, bootstrapping is used due to small data. We have used the accuracy, sensitivity and specificity as the measuring criteria of classification techniques. In absence of the outlier, LDA gives maximum classification accuracy, sensitivity and specificity. When the percentage of outlier is increases, the performance of RF tends to get better than LDA. Generally, we can suggest LDA when such type of data is obtained in the absence of outliers and RF in the presence of outliers.

Keywords: Bootstrapping, classification techniques, outlier, wine

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