



P-ISSN : XXXX-XXXX  
E-ISSN : 3108-9895

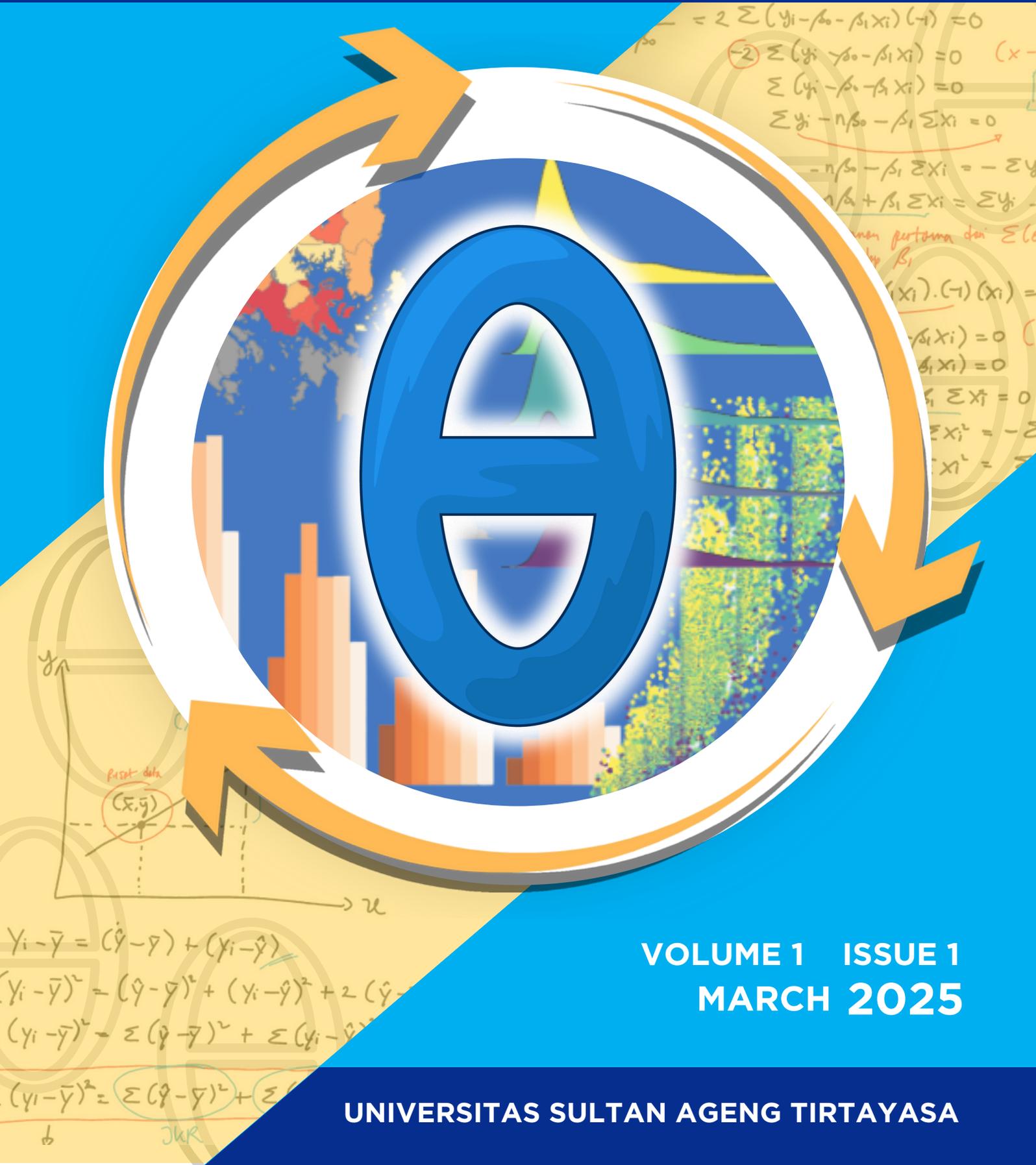


# Theta: Journal of Statistics



VOLUME 1 ISSUE 1  
MARCH 2025

UNIVERSITAS SULTAN AGENG TIRTAYASA



$$= 2 \sum (y_i - \beta_0 - \beta_1 x_i) (-1) = 0$$

$$-2 \sum (y_i - \beta_0 - \beta_1 x_i) = 0 \quad (x -$$

$$\sum (y_i - \beta_0 - \beta_1 x_i) = 0$$

$$\sum y_i - n\beta_0 - \beta_1 \sum x_i = 0$$

$$-n\beta_0 - \beta_1 \sum x_i = -\sum y_i$$

$$n\beta_0 + \beta_1 \sum x_i = \sum y_i$$

men pertama dari  $\sum (y_i - \beta_0 - \beta_1 x_i) \cdot (-1) (x_i) =$

$$\sum (\beta_1 x_i) = 0$$

$$\sum (\beta_1 x_i) = 0$$

$$\sum x_i = 0$$

$$\sum x_i^2 = -\sum$$

$$\sum x_i^2 = -\sum$$

riset data

$(x, y)$

$$y_i - \bar{y} = (\hat{y} - \bar{y}) + (y_i - \hat{y})$$

$$(y_i - \bar{y})^2 = (\hat{y} - \bar{y})^2 + (y_i - \hat{y})^2 + 2(\hat{y} - \bar{y})(y_i - \hat{y})$$

$$(y_i - \bar{y})^2 = \sum (\hat{y} - \bar{y})^2 + \sum (y_i - \hat{y})^2 + 2 \sum (\hat{y} - \bar{y})(y_i - \hat{y})$$

$$(y_i - \bar{y})^2 = \sum (\hat{y} - \bar{y})^2 + \sum (y_i - \hat{y})^2$$

$\downarrow$   $\downarrow$  JKK



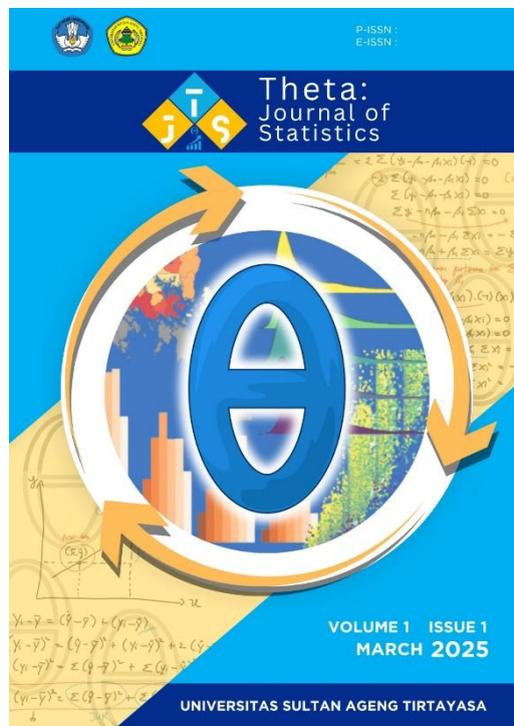
# Theta: Journal of Statistics

---

Journal Volume 1 Issue 1, 2025

---

Editor in Chief: Assist. Prof. Syarif Abdullah, S.Si., M.Si.



Published by

---

Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng  
Tirtayasa (UNTIRTA), Indonesia

---

<https://jurnal.untirta.ac.id/index.php/tjs/index>

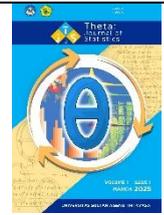
ISSN: XXXX-XXXX | E-ISSN: XXXX-XXXX



# Theta: Journal of Statistics

Journal homepage: [www.jurnal.untirta.ac.id/index.php/tjs](http://www.jurnal.untirta.ac.id/index.php/tjs)

P-ISSN: XXXX-XXXX E-ISSN: XXXX-XXXX



## Editorial Board

### Editor-in-Chief

Assist. Prof. Syarif Abdullah, S.Si., M.Si, Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa, Indonesia

### Managing Editor

1. Assist. Prof. Yanyan Dwiyantri, ST., MT., Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa, Indonesia
2. Assist. Prof. Miftahus Sholihin, S.Si., M.Si., Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa, Indonesia
3. Assist. Prof. Muklas Rivai, S.Stat, M.Si., Actuarial Study Program, Institut Teknologi Sumatera, Indonesia
4. Assist. Prof. Atia Sonda, S.Si., M.Si., Department of Industrial Engineering, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa, Indonesia
5. Assist. Prof., Isnaini Mahuda, S.Pd., M.Si., Department of Statistic, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa, Indonesia
6. Assist. Prof. Irma Fitria, S.Si., M.Si., CDS., Statistics Program Study, Institut Teknologi Kalimantan, Indonesia
7. Assist. Prof. Agung Satrio Wicaksono, S.Mat., M.Si., Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa, Indonesia
8. Assist. Prof. Ferdian Bangkit Wijaya, S.Stat., M.Si., Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa., Indonesia
9. Assist. Prof. Putri Dina Sari, S.Si, M.Si., Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa., Indonesia
10. Assist. Prof. Fajri Ikhsan, S.Si., M.Si., Department of Chemistry, Faculty of Mathematics and Natural Sciences, Universitas Negeri Padang, Indonesia

### Graphic Design

Fajri Ikhsan, S.Si., M.Si., Department of Chemistry, Faculty of Mathematics and Natural Sciences, Universitas Negeri Padang, Indonesia

### Secretariat

Yanyan Dwiyantri, S.Si., M.T., Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa, Indonesia

---

Department of Statistics  
Faculty of Engineering  
Universitas Sultan Ageng Tirtayasa  
Jalan Jenderal Sudirman KM 3, Kotabumi  
Kec. Purwakarta, Kota Cilegon, Banten 42435, Indonesia  
E-mail: [tjs@untirta.ac.id](mailto:tjs@untirta.ac.id)

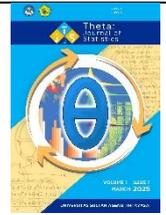
---



# Theta: Journal of Statistics

Journal homepage: [www.jurnal.untirta.ac.id/index.php/tjs](http://www.jurnal.untirta.ac.id/index.php/tjs)

P-ISSN: XXXX-XXXX E-ISSN: XXXX-XXXX



## Reviewer Board

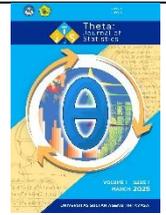
1. Dr. Faula Arina, S.Si., M.Si, Department of Statistics, Universitas Sultan Ageng Tirtayasa, Indonesia
2. Dr.nat.techn. Weksi Budiaji, Department of Statistics, University of Sultan Ageng Tirtayasa, Indonesia
3. Assist. Prof. Alfisyahrina Hapsery, S.Si., M.Si, Department of Statistics, Faculty of Science and Technology, University of PGRI Adi Buana Surabaya, Indonesia
4. Assist. Prof. Gustriza Erda, M.Si., Study Program of Statistics, Faculty of Mathematics and Science, Universitas Riau, Indonesia
5. Assist. Prof. Diana Nurlaily, S.Si., M.Stat., Statistics Study Program, Department of Science and Data Analytics, Faculty of Science and Information Technology, Kalimantan Institute of Technology, Indonesia
6. Asst. Prof. Mukhtar Mukhtar, Ph.D., Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa, Indonesia
7. Assist. Prof. Miftahul Huda, S.Mat., M.Si., Department of Statistics, Universitas Bina Bangsa, Indonesia
8. Assist. Prof. Himmatul Mursyidah, S.Si., M.Si, Department of Informatics, Faculty of Engineering, Universitas Muhammadiyah Banten, Indonesia
9. Assist.Prof Aulia Ikhsan, S.Si., M.Si, Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa, Indonesia



# Theta: Journal of Statistics

Journal homepage: [www.jurnal.untirta.ac.id/index.php/tjs](http://www.jurnal.untirta.ac.id/index.php/tjs)

P-ISSN: XXXX-XXXX E-ISSN: XXXX-XXXX



## Preface

Dear Scholars and Researchers,

We invite you to read and enjoy **Theta: Journal of Statistics** March 2025 Edition Volume 1 Issue 1. This journal aims to encourage the study of statistics coverage, probability, and applications. The article can be a research result, a case study, or a literature review, with coverage

**Theta: Journal of Statistics** is a double blind-peer-review journal in the field of statistics. This Journal is published by the Department of Statistics, Faculty of Engineering, Universitas Sultan Ageng Tirtayasa in collaboration with Badan Kerja Sama Perguruan Tinggi Negeri (BKS PTN) Wilayah Barat Bidang Teknik (State University Cooperation Agency Western Region for Engineering) and Forum Pendidikan Tinggi Statistika Indonesia (Indonesian Statistics Higher Education Forum) or abbreviated as FORSTAT.

**Theta: Journal of Statistics** publishes its journal issues in March and September. We accept submissions from all over the world. Our Editorial Board members are prominent and active international researchers in statistics fields who ensure efficient, fair, and constructive peer-reviewed processes. All accepted articles will be published and freely available (no charge) to all readers with worldwide visibility and coverage.

We anticipate that these published papers will encourage other academics to generate new ideas and broaden their perspectives for publishing submissions. Writing and publishing are also fun activities for our scholars, academics, and practitioners.

We look forward to welcoming you to the future of **Theta: Journal of Statistics**, which will include new insights into modern Statistics. We also thank and appreciate all the efforts of the authors, reviewers, and the editorial board. Your invaluable help is greatly appreciated. We wish you great health, joy, and happiness in 2025.

Thank you, and happy reading!

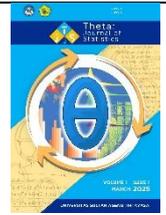
Syarif Abdullah  
Editor in chief



# Theta: Journal of Statistics

Journal homepage: [www.jurnal.untirta.ac.id/index.php/tjs](http://www.jurnal.untirta.ac.id/index.php/tjs)

P-ISSN: XXXX-XXXX E-ISSN: XXXX-XXXX



## Contents

- |   |       |
|---|-------|
| <b>Comparing Best Subset and Lasso Regression in the Customer Loyalty Prediction in a Restaurant Dataset</b><br><i>Aulia Anggitanniradi, Weksi Budiaji, Juwarin Pancawati, Sri Mulyati</i>  | 1-7   |
| <b>Analyzing of Consumer Price Index Influence on Inflation in Cilegon City for the Years 2023-2024</b><br><i>Atira Keisha Belva Armanda Fadhila, Patricia Pingkan Kumenap, Stella Caroline Roma Ito, Zilda Ainun Tazkia, Isnaini Mahuda, Yanyan Dwiyantri</i>                              | 8-15  |
| <b>Forecasting the Open Unemployment Rate in Banten Province Using the FB Prophet Method in Python Programming Language</b><br><i>Ferdian Bangkit Wijaya, Deananta Pramudia Putra, Mahsa Azzahra, Faula Arina, Fajri Ikhsan</i>   | 16-26 |
| <b>Analysis of the Spatial Distribution Pattern of Poverty Percentage in Central Java in 2024 Using the Spatial Autocorrelation Approach</b><br><i>Miftahus Sholihin, Gustriza Erda, Putri Dina Sari, Agung Satrio Wicaksono, Atia Sonda, Muhammad Fabian Reinhard Delano, Syukron Faiz</i> | 27-34 |
| <b>Similarity Analysis of the Default Transition of Bond Issuer in Indonesia using Euclidean Distance</b><br><i>Aulia Ikhsan, Fikri C Permana, Ayu Nurulhaq Putri, Rifki Hamdani, Mukhtar Mukhtar, Syarif Abdullah</i>  | 35-42 |
| <b>Robust Quality Control Implementation for Nickel Pig Iron Using Median Absolute Deviation Estimators</b><br><i>Aditya Rahadian Fachrur, Chyntia Devi Octaviany, Wiwien Suzanti, Midia Rahma, Mariana Feronica Damanik, Ferdian Bangkit Wijaya</i>  | 43-50 |