

BUKTI KORESPONDENSI ARTIKEL SINTA 5

Judul : **OPTIMIZATION OF NAÏVE BAYES USING BACKWARD ELIMINATION FOR HEART DISEASE DETECTION**

Penulis: **Saeful Amri, Ariska Fitriyana Ningrum, Prizka Rismawati Arum**

Jurnal : **Statistika Universitas Muhammadiyah Semarang**

Link : <https://jurnal.unimus.ac.id/index.php/statistik/article/view/13303>

Bukti korespondensi artikel dengan judul Optimization Of Naïve Bayes Using Backward Elimination For Heart Disease Detection di Jurnal Statistika Universitas Muhammadiyah Semarang sebagai berikut:

1. Submit Artikel

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#13303 Summary

SUMMARY REVIEW EDITING

Submission

| | |
|----------------|--|
| Authors | Saeful Amri, Ariska Fitriyana Ningrum, Prizka Rismawati Arum |
| Title | OPTIMIZATION OF NAÏVE BAYES USING BACKWARD ELIMINATION FOR HEART DISEASE DETECTION |
| Original file | 13303-40336-1-SM.DOCX 2023-10-06 |
| Supp. files | None |
| Submitter | amri Saeful Amri |
| Date submitted | October 9, 2023 - 01:42 PM |
| Section | Articles |
| Editor | Tiani Utami, M.Si |
| Abstract Views | 0 |

Status

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| Status | Published Vol 11, No 2 (2023): Jurnal Statistika Universitas Muhammadiyah Semarang |
| Initiated | 2023-11-30 |
| Last modified | 2023-11-30 |

Submission Metadata

Authors

| | |
|---------------|---|
| Name | Saeful Amri |
| Affiliation | Departement of Data Science, Faculty of Science and Agriculture Technology, University of Muhammadiyah Semarang, Semarang |
| Country | Indonesia |
| Bio Statement | — |

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Journal Template

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Artikel dengan judul Optimization Of Naïve Bayes Using Backward Elimination For Heart Disease Detection di submit di Jurnal Statistika Universitas Muhammadiyah Semarang pada tanggal **09 Oktober 2023**.



2. Proses Review Artikel

Artikel dengan judul Optimization Of Naïve Bayes Using Backward Elimination For Heart Disease Detection telah di review tanggal 09 Oktober 2023

#13303 Review

[SUMMARY](#) [REVIEW](#) [EDITING](#)

Submission



| | |
|---------|---|
| Authors | Saeful Amri, Ariska Fitriyana Ningrum, Prizka Rismawati Arum  |
| Title | OPTIMIZATION OF NAÏVE BAYES USING BACKWARD ELIMINATION FOR HEART DISEASE DETECTION |
| Section | Articles |
| Editor | Tiani Utami, M.Si  |

Peer Review

Round 1

| | |
|----------------|----------------------------------|
| Review Version | 13303-40383-1-RV.DOCX 2023-10-09 |
| Initiated | 2023-10-10 |
| Last modified | 2023-11-01 |
| Uploaded file | None |

Editor Decision

| | |
|-----------------------|---|
| Decision | Accept Submission 2023-11-28 |
| Notify Editor |  Editor/Author Email Record  2023-11-27 |
| Editor Version | None |
| Author Version | 13303-41314-1-ED.DOCX 2023-11-27 DELETE |
| Upload Author Version | <input type="button" value="Choose File"/> No file chosen <input type="button" value="Upload"/> |

[JSUNIMUS] Editor Decision

External

Inbox x



Tiani Wahyu Utami, M.Si <jurnal@unimus.ac.id>

Wed, Nov 1, 11:08 AM



to me, Ariska ▾

amri Saeful Amri:

We have reached a decision regarding your submission to Jurnal Statistika Universitas Muhammadiyah Semarang, "OPTIMIZATION OF NAÏVE BAYES USING BACKWARD ELIMINATION FOR HEART DISEASE DETECTION".

Our decision is to:

Tiani Wahyu Utami, M.Si
Department of Statistics, Universitas Muhammadiyah Semarang, Indonesia
tianiutami@unimus.ac.id

Reviewer A:

1. Suggestions/improvements that the author should make in the title:
(none)

2. Suggestions/improvements that the author should make on the Abstract and keywords:

- detection or diagnosis should be included in the key-words
- "This research uses a private dataset of heart disease." This sentence should be written in more subtle way. If it is impossible to state the source, better not to mention it at all.
- "The results of this research," this part should be revised. Suggestion: "According to the results of this research."

3. Suggestions/improvements that the author should make in the introduction:

- Breaking the introduction into different paragraphs with distinctive main ideas would be a nice touch to this paper.
- In sentences referring to other studies/papers, better not to re-write the authors' name (since the citation has already provided the information)

4. Suggestions/improvements that the author should make on the methodology:
"Lit Review"

- Why is India (and even Andhra Pradesh, still a part of India) mentioned in the beginning? Is it the source of the data? It's better to add context about this because the introduction only discusses the event of heart failure across Indonesia.
- The heart Disease section should talk about factual medical aspects of the disease (what causes it, why it is urgent to be studied, etc)
- The Data Mining section is too broad. There is a missing period (.) in one of those sentences.
- The next two sections need to be more details.

Methodology

- What is private data? it should be clear. If it's confidential, at least mention how the data were collected.
- 'Steps of Analysis' to revise typo in 3.2
- There should be an explanation for each step in 3.2

5. Suggestions/improvements that the author should make on the results and discussion:

- Section 4.1 should be placed in methodology (section 3)
- 4.2 should be titled 'Data Analysis' and it should be placed in Methodology. Moreover, it should be under the section of 'Performance Evaluation' or related to that.

Suggestion: add details for each step mentioned in the methodology and no need to repeat it in the results & discussion section.

- The discussion of the results is too short. 'ACC' has not been introduced anywhere, better to use 'Accuracy' as mentioned in the Methodology.
- Are there any features used to help the classification? All those variables should be mentioned and explained.

6. Suggestions/improvements that the author should make at the conclusion:

- The conclusion should be written in concise sentence(s).

7. Other suggestions/improvements that the author should make.:

The study is interesting. The writing should be revised well to convey all good results from the study.

Reviewer B:

1. Suggestions/improvements that the author should make in the title:
clear

2. Suggestions/improvements that the author should make on the Abstract and keywords:

- It would be better to add keywords, namely detection or diagnosis
- Data used in research should include the data source

3. Suggestions/improvements that the author should make in the introduction:

The introduction may be broken up into several paragraphs with different main ideas

- There is repetition of the author's name. In sentences that refer to research/other papers, the author's name should not be rewritten

4. Suggestions/improvements that the author should make on the methodology:

- It is best to explain how the data was collected
- It should be explained in each step 3.2

5. Suggestions/improvements that the author should make on the results and discussion:

- There is no need to repeat the detailed research steps mentioned in the Methodology in the results and discussion section
- the discussion section is too short

6. Suggestions/improvements that the author should make at the conclusion:

- The conclusion section should be written in more concise sentences.



7. Other suggestions/improvements that the author should make.:

The article writing procedure should be revised to make it better so that it can highlight research results

3. Proses Perbaikan Artikel

Artikel dengan judul Optimization Of Naïve Bayes Using Backward Elimination For Heart Disease Detection melakukan perbaikan pada tanggal 27 November 2023

Editor Decision

| | |
|-----------------------|---|
| Decision | Accept Submission 2023-11-28 |
| Notify Editor |  Editor/Author Email Record  2023-11-27 |
| Editor Version | None |
| Author Version | 13303-41314-1-ED.DOCX 2023-11-27 DELETE |
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Editorial Office:
Department of Statistics
Faculty Of Mathematics And Natural Sciences
Universitas Muhammadiyah Semarang
Jl. Kedungmundu No. 18 Semarang Indonesia

[JSUNIMUS] Copyediting Review Request Inbox x



Fatkhurokhan Fauzi, S.Si., M.Stat <jurnal@unimus.ac.id>
to me ▾

Thu, Nov 30, 9:30AM (1 day ago)

amri Saeful Amri:

Your submission "OPTIMIZATION OF NAÏVE BAYES USING BACKWARD ELIMINATION FOR HEART DISEASE DETECTION" for Jurnal Statistika Universitas Muhammadiyah Semarang has been through the first step of copyediting, and is available for you to review by following these steps.

1. Click on the Submission URL below.
2. Log into the journal and click on the File that appears in Step 1.
3. Open the downloaded submission.
4. Review the text, including copyediting proposals and Author Queries.
5. Make any copyediting changes that would further improve the text.
6. When completed, upload the file in Step 2.
7. Click on METADATA to check indexing information for completeness and accuracy.
8. Send the COMPLETE email to the editor and copyeditor.

Submission URL:

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Username: amri

This is the last opportunity to make substantial copyediting changes to the submission. The proofreading stage, that follows the preparation of the galleys, is restricted to correcting typographical and layout errors.

If you are unable to undertake this work at this time or have any questions, please contact me. Thank you for your contribution to this journal.

Fatkurokhman Fauzi, S.Si., M.Stat

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#13303 Editing

SUMMARY

REVIEW


EDITING

Submission


Authors Saeful Amri, Ariska Fitriyana Ningrum, Prizka Rismawati Arum 

Title OPTIMIZATION OF NAÏVE BAYES USING BACKWARD ELIMINATION FOR HEART DISEASE DETECTION

Section Articles

Editor Tiani Utami, M.Si 

Copyediting

| REVIEW METADATA | REQUEST | UNDERWAY | COMPLETE |
|---|------------|------------|--|
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| 3. Final Copyedit File: 13303-41383-2-CE.DOCX 2023-11-30 | 2023-11-30 | — | 2023-11-30 |

Copyedit Comments  No Comments

4. Penerbitan LoA

Artikel dengan judul Optimization Of Naïve Bayes Using Backward Elimination For Heart Disease Detection mendapatkan Letter of Acceptance pada tanggal 30 November 2023

[JSUNIMUS] OPTIMIZATION OF NAÏVE BAYES USING BACKWARD ELIMINATION FOR HEART DISEASE DETECTION

External Inbox x



Fatkhurokhan Fauzi, S.Si., M.Stat <jurnal@unimus.ac.id>

Nov 30, 2023, 9:39 AM (1 day ago)



to me, Ariska, Prizka

Berikut kami lampirkan LoA

Jurnal Statistika Universitas Muhammadiyah Semarang (ISSN: 2338-3216)

<http://jurnal.unimus.ac.id/index.php/statistik>

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Letter of Acceptance

To Whom It May Concern
No.005/02/XI/JSUNIMUS/2023

Chief Editor of Jurnal Statistika Universitas Muhammadiyah Semarang has decided that the name of article below has been reviewed and will be published in Vol. 11 NO. 2 November 2023

Authors : Saeful Amri, Ariska Fitriyana Ningrum, Prizka Rismawati Arum
Email : saefulamri@unimus.ac.id
Title : OPTIMIZATION OF NAÏVE BAYES USING BACKWARD ELIMINATION FOR HEART DISEASE DETECTION
Journal Link : jurnal.unimus.ac.id/index.php/statistika/index
Indexation : Garuda, Dimensions, Google Scholar, Sinta 5, etc.
Status : Accepted, November 27th, 2023

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Author Fee : Rp. 200.000,00
Bank : BNI
Account Name : Fatkhurokhan Fauzi
Account Number : 0983555985

Please send your bank transfer receipt via WA 087700016217

Editor in Chief

Fatkhurokhan Fauzi, S.Si., M.Stat

5. Penerbitan Artikel

Artikel dengan judul Optimization Of Naïve Bayes Using Backward Elimination For Heart Disease Detection di publish pada tanggal 30 November 2023

Vol II, No 2 (2023): Jurnal Statistika Universitas Muhammadiyah Semarang

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| K-Means Algorithm for Grouping Provinces in Indonesia Based on Macroeconomic and Criminality Indicators | PDF 12-21 |
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OPTIMIZATION OF NAÏVE BAYES USING BACKWARD ELIMINATION FOR HEART DISEASE DETECTION

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(3) Departement of Statistics, Faculty of Science and Agriculture Technology, University of Muhammadiyah Semarang, Semarang

(*) Corresponding Author

Abstract

Heart disease is the main cause of death in humans. Even though preventive measures have been taken such as regulating food (diet), lowering cholesterol, and treating weight, diabetes, and hypertension, heart disease remains a major health problem. There are several factors that cause heart disease, including age, type of chest pain, high blood pressure, sugar levels, ECG test values, maximum heart rate, and induced angina. To reduce the percentage of deaths due to heart disease, we need a system that can predict heart disease. The algorithm used in this research is a combination of the Backward Elimination and Naïve Bayes algorithms to increase accuracy in diagnosing heart disease. According to the results of this research, the Naïve Bayes algorithm has an accuracy value of 78.90% and an Area Under Curve (AUC) value of 0.86, which is included in the good classification category. Combining the Backward Elimination and Naïve Bayes algorithms has an accuracy value of 82.31% and an Area Under Curve (AUC) value of 0.88.

Keywords

Heart Disease Detection; Naïve Bayes; Backward Elimination

Full Text:

PDF

References

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