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Research Article [OPEN ACCESS]

Article title – The title should be informative and reflect the content of the research

Author_name*, Author_name, Author_name

ABSTRACT

Abstracts should be succinct, typically ranging from 150 to 200 words, and structured to include the study's objectives, methods used, key findings, and conclusions. Use clear and accessible language, avoiding unnecessary technical jargon. Below the abstract, provide 3-5 keywords that encapsulate the essence of the research. **Example**: This study investigates the impact of deep learning techniques in image recognition, focusing on the use of Convolutional Neural Networks (CNNs) and Recurrent Neural Networks (RNNs). The research methodology involves qualitative analysis of the performance of various deep learning model architectures using benchmark datasets such as CIFAR-10 and ImageNet. Results indicate that hybrid models combining CNNs and RNNs significantly enhance image recognition accuracy compared to single approaches. These findings underscore the potential of deep learning techniques for improving image recognition applications, reinforcing the case for employing hybrid models in complex image recognition systems.

Keyword: Deep learning, image recognition, convolutional neural networks, recurrent neural networks, hybrid models

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1. INTRODUCTION

Purpose and context: the introduction aims to acquaint readers with the background, objectives, and context of the conducted research. It usually commences by presenting a general background on the researched topic, including its relevance within the relevant field of study. For example, if the article focuses on advancements in medical technology, the introduction will discuss existing challenges or gaps in knowledge motivating the research.

Literature review: this section also includes a review of related literature, where the authors introduce pertinent previous works and identify gaps in knowledge, they intend to fill through their research. This literature review supports the argument for the relevance of the study and the need for new research contributions, establishing a clear continuum from existing knowledge to the current study.

Objectives: the introduction must clearly define the research objectives or research questions that the study seeks to address. Additionally, it often outlines the hypotheses being tested or the initial expectations of the research. This section serves as a foundation for readers to comprehend the research direction and the expected outcomes. Furthermore, objectives may also encompass the primary aims of the conducted research. For example, whether the research aims to develop new algorithms, enhance system performance, or provide novel solutions to specific computational issues.

2. MATERIALS AND METHODS (EXPERIMENTAL) / LITERATURE REVIEW, HYPOTHESES, AND METHODS (ANALYSIS) / LITERATURE REVIEW AND METHODS (SLR)

The "Materials and methods" section of a scientific article should provide detailed and systematic information about the materials or data used and the methods applied in the research. Specifically, clearly describe the sources of data or samples used, including technical specifications if relevant such as software types, hardware, or instruments utilized. Explain the experimental procedures step-by-step to facilitate replication by readers. Avoid ambiguous or implied language and ensure that the methods used adhere to applicable research ethics standards.

The "Literature Review, Hypotheses, and Methods" section integrates several critical components. The literature review presents a comprehensive overview of pertinent previous research, identifying key studies, elucidating recent advancements in the research domain, and articulating how the current study addresses gaps in knowledge or introduces novel approaches to unresolved issues. The hypotheses section details the specific hypotheses tested, grounded in the literature review and existing knowledge, ensuring they are specific, measurable, and verifiable through appropriate experiments or analyses. It also includes rationale or supporting evidence justifying the selection of hypotheses for examination within the research context. Lastly, the methods section provides detailed descriptions of the materials or data used, as well as the methodologies applied in the study. It outlines the sources of data or samples, the experimental or analytical techniques employed, and the procedures followed to enable replication by readers, all while adhering to applicable research ethics standards.

2.1 Subsection1

Citations in academic papers should follow the APA 7th edition style, managed through reference management software such as Mendeley, to ensure consistency and accuracy throughout the manuscript. When citing sources within the text, include the author's surname and publication year in parentheses at the end of the sentence. At the beginning of a sentence, include the author's surname and publication year directly followed by the information presented (Author, Year). Ensure all citations are formatted correctly according to APA guidelines, providing clear references to consulted sources and facilitating access to supplementary material through an alphabetically ordered reference list at the end of the paper.

At the beginning of a sentence: according to APA 7th edition guidelines, the author's last name and publication year should be included at the beginning of the sentence if directly quoting from a specific source. For example, "Lim & Trista Ayunda (2023) suggested that AI technologies have revolutionized healthcare."

Within a sentence: when citing within a sentence, use parentheses to include the author's last name and publication year. For instance, "The study by Lim & Trista Ayunda (2023) found significant correlations between sleep patterns and cognitive functions."

At the end of a sentence: in APA 7th edition style, when citing at the end of a sentence, place the author's last name and the publication year in parentheses immediately following the information being cited. This format ensures clarity and proper attribution of sources used in the text. For example, "Recent studies have shown promising results in the field of renewable energy (Lim & Trista Ayunda, 2023)."

In the article, if tables are used, please use the menu REFERENCES > Insert Caption to create the names of the tables used. Subsequently, to refer to the tables used, you can utilize the Cross-reference menu (e.g., Table 1).

Table 1. Title or caption (helping readers understand the information presented visually)

Col-1	Col-2	Col-3	Col-4

Please use single spacing for entries within the table. If referencing tables from the bibliographic sources used in this study, they may be formatted as follows:
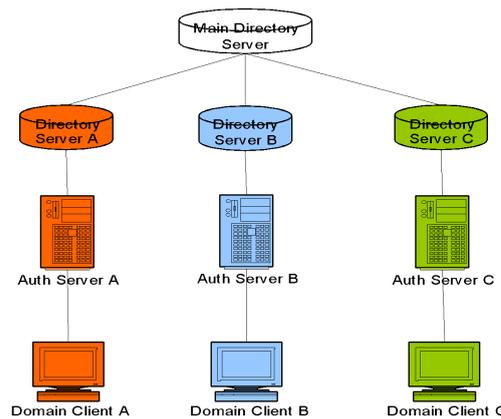
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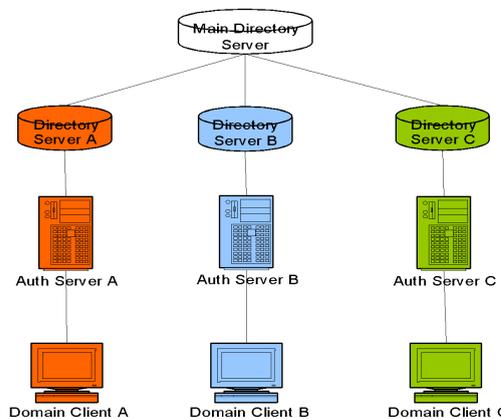| Col-1	Col-2	Col-3	Col-4

Sources: authors (year)

2.2   Subsection2

If using images in the article, please use the menu REFERENCES > Insert Caption to create captions for the images used. Subsequently, to reference the images used, you can utilize the Cross-reference menu (e.g., Figure 1).

Figure 1. Title or caption

If the article includes figures sourced from bibliographic references used in this research, they can be presented as follows:

Figure 2. Title or caption

Sources: authors (year)

2.3   Subsection3

If you are using Word, please use the Equation feature (in Office 365), center-align the equation, and number them starting from (1), (2), and so forth.

$$y_{ij} = w_i r_{ij} \qquad (1)$$

3.   RESULTS AND DISCUSSION

Firstly, in the Results section, researchers should meticulously present the empirical findings of their study. This involves detailing experimental outcomes, algorithm performance metrics, or software/system outputs with clarity. For instance, if investigating the efficiency of a new sorting algorithm, the Results section might showcase runtime comparisons across various data sets and hardware configurations, supported by statistical analysis to validate significant differences.

Secondly, the Discussion section interprets these results through the lens of existing literature and computational theory. It involves comparing findings with prior research, explaining any deviations or advancements, and discussing implications for theoretical frameworks or practical applications. For example, discussing how a newly developed machine learning model outperforms existing benchmarks in terms of accuracy and speed, while also considering potential limitations or biases in the experimental setup.

In analytical research, particularly concerning Structural Equation Modeling (SEM) or other model-testing methods, there are several critical steps to follow:

Firstly, Measurement Model (Outer Model) Assessment focuses on evaluating and validating the constructs used in the study. This involves assessing the reliability and validity of each measured variable, employing techniques such as exploratory or confirmatory factor analysis to examine the relationships between latent variables and their indicators. For example, in a study on customer satisfaction, this section would demonstrate how survey questions related to customer satisfaction are tested within a measurement model to ensure that these variables are reliable and valid.

Secondly, Inner Model Analysis concentrates on testing the relationships between latent variables within the developed structural model. It entails testing hypotheses about causal relationships between variables, using techniques like path analysis or SEM to evaluate the strength and significance of these relationships. For instance, in research on factors influencing the success of technology startups, this section would present path analysis results depicting relationships between variables such as product innovation, market acceptance, and financial performance.

4.   CONCLUSION

Restatement of Objectives: the conclusion begins with a brief recap of the primary objectives of the research. This helps readers to revisit the research goals and link them back to the findings presented.

Summary of findings: this section provides a concise summary of the main findings discussed in the results and discussion sections. these findings should be presented objectively without introducing new data.

Implications: the conclusion should outline the implications of the research findings for theory, practice, policy, or society at large. this demonstrates the relevance of the research in a broader context and explains how the results can be utilized or applied in real-world settings.

Limitations: it is important to identify the limitations of the study. this may include methodological constraints, data limitations, or other factors that affect the interpretation of the findings.

Recommendations for future research (if needed): the conclusion should include suggestions for future research based on the findings and identified limitations. this helps to pave the way for subsequent studies that could expand or clarify the results obtained.

Final thought: finally, the conclusion can be ended with a summary of the key message of the research and emphasize the importance of the study's contribution to the literature and practice in the relevant field.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ACKNOWLEDGEMENTS (if any)

REFERENCES

Lim, F., & Trista Ayunda, A. (2023). Analisis Sentimen Masyarakat Indonesia Terhadap Aplikasi Threads di Twitter Menggunakan Naïve Baiyes. *JUSIFO (Jurnal Sistem Informasi)*, *9*(2), 55–64. https://doi.org/10.19109/JUSIFO.V9I2.19965

IMPORTANT NOTES*

1. When writing articles for Jusifo (Journal of Information Systems), please adhere to the provided formatting guidelines. Use the Style Gallery in the Style menu to facilitate the copyediting process.

2. Utilize Reference Management Software, specifically Mendeley Reference Manager. You can download the tool at https://www.mendeley.com/. Install the software and create a free account on the site following the instructions provided. Use the Citation Style – American Psychological Association 7th Edition in the Mendeley Desktop menu.

3. The bibliography must include at least 20 (twenty) highly relevant references cited in the manuscript; more references are encouraged.

4. Selected references should be no older than 5 years from the year of article submission.

5. Please pay close attention to the formatting of tables.

6. All figures used must be clear and adjusted to high-resolution sizes.

7. The total number of pages for articles in Jusifo should be a minimum of 6 pages and a maximum of 15 pages.

8. Please ensure all guidelines provided are strictly followed as standards for article submission to Jusifo.

9. All articles submitted to Jusifo will undergo plagiarism checking using Turnitin. The maximum tolerance limit for plagiarism check is 25%. We will notify authors once the article submission is successful.

Thank you. Warm regards,
(Editor in Chief)

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