

Article Template for International Journal of Sustainable Building, Infrastructure, and Environment

First Author^{1*}, Second Author², Third Author³, Fourth Author⁴

¹Faculty of Information Technology, Universitas Stikubank, Jl. Tri Lomba Juang No 1 Semarang 50241, Central Java, Indonesia

²Faculty of Engineering and Informatics, Universitas PGRI Semarang, Jl. Sidodadi-Timur No.24 Semarang, Central Java 50232, Indonesia

³Faculty of Information Technology, Universitas Kristen Satya Wacana, Jl. Dr. O. Notohamidjodjo, Salatiga 50715, Central Java, Indonesia

⁴Faculty of Computer Science, Universitas Amikom Yogyakarta, Jl. Ring Road Utara Yogyakarta, Special Region of Yogyakarta 55283, Indonesia

*first_author@university.ac.id

Abstract. This document describes guidelines for Authors in writing an article in International Journal of Sustainable Building, Infrastructure, and Environment (IJOSBIE). This abstract section should be typed in 10 pt font and number of words of 100-150. The abstract should be typed as concise as possible and should be composed of: problem statement, method, scientific finding results, and a short conclusion. The abstract should be typed in one paragraph only. All sections in the manuscript should be typed using Times New Roman font. Authors should use this document as their article template.

Keywords: author guidelines, ASSET, article template

1. Introduction

This document is an author's guide and article template of the International Journal of Sustainable Building, Infrastructure, and Environment (IJOSBIE) in publications starting in Volume 2, Issue 1, 2020. The first paragraph is not indented. Write the full paper article using Microsoft Office Word format (not .pdf). The full paper should be submitted as Microsoft Office Word (.doc or .docx) file.

The second and the next paragraphs is indented. For easiness of writing the article, this guidance is provided in digital version, so authors can write directly in this format without worrying the format of the article. Every article sent to the IJOSBIE editor must follow these writing instructions. If the article does not match, the writing will be returned without further review. The author must use the style

provided in this template. This template can be viewed on the IJOSBIE page (<http://journal.upgris.ac.id/index.php/ijosbie>).

1.1. Writing the Title, Nama, and Affiliation of the Author

Article title, author's name (without academic title), affiliation and author's affiliate address are placed on the first page under the article title. The distance between the lines between the title and the author's name is 2 spaces, while the distance between the author's affiliate address and the abstract title is 1 space. Keywords must be written below the abstract text for each language, arranged in alphabetical order and separated by commas with 3-5 words.

The author of the responsible or corresponding author must be marked with an asterisk *. At the bottom of the left column of the first page, you must write the Corresponding Author and also write the email address (using an email containing the address of the institution).

If there are more than one author, all authors' names are separated by commas (.). If the author has more than one affiliate, the affiliation is written in sequence. Superscript marks in the form of numbers, for example 1, are given behind the author's name. If all authors are from one affiliation, this sign does not need to be given.

2. Methods

The manuscript written must contain the following components of scientific articles, namely: (a) Article Title, (b) Author's Name (without title), (c) Author's Affiliate Address, (d) Abstract and Keywords, (e) Chapter I Introduction, (f) Chapter II Research Methods, (g) Chapter III Results and Discussion, (h) Chapter IV Conclusions, (i) Acknowledgments (if any), and (j) Bibliography.

2.1. Provision of Chapters and Sections

Writing chapters in the article content section follows the IMRAD systematics, namely Introduction, Methods and Materials, Results and Discussion, and Conclusions, must be numbered in sequential Arabic numbering format starting from number one. Chapters are written in bold with the Title Case format and are aligned left with no underline. Sub-chapters are written in italic with Sentence case format and left-aligned and use level one numbering format using sub-numbering. The use of sub-chapters should be minimized.

2.2. Language and Layout Requirements

The manuscript must be written in English with a maximum number of 10 pages, including figures and tables. Manuscripts must be written in accordance with the template of this article in the form of print ready (Camera ready). Articles must be written with A4 writing size (210 x 297 mm) and with a format of 25 mm left margin, 25 mm right margin, 40 mm upper margin, and 27 mm lower margin. The manuscript must be written in Times New Roman font with a font size of 11 pt (except the title of the article and the abstract), spaced out in one space.

New paragraphs begin 10 mm from the left border, while between paragraphs are not given a space between. All numbers are written in Arabic numbers, except at the beginning of the sentence.

2.3. Provisions of Figures and Tables

Tables and figures are placed in groups of text after the tables or figures are referred. Figures and tables are placed so that their position is on the top of the page. Each figures must be given a figure caption (Figure Caption) below the image and numbered in Arabic numerals followed by the image title (Figure 1). Each table must be given a table title (Table Caption) and numbered in Arabic numerals at the top of the table followed by the table title (Table 1). Images must be guaranteed to print clearly (font size, resolution and line size must be printed clearly). Figures and tables and diagrams / schemes should be placed in columns between groups of text or if they are too large in the middle of the page (Figure 2). Tables should not contain vertical lines, horizontal lines are allowed but only important ones (see table writing in Table 1).

Figure 1. Research Methodology

Table 1. Research on weather/rain prediction

Reference	Variables	Method
[1]	Temperature	Fuzzy
[2]	Barometric pressure, temperature, dew point, humidity, wind speed	Fuzzy
[3]	Temperature, rainfall, humidity, exposure time, duration of fog, evaporation, wind, atmospheric pressure, number of clouds	Decision trees, bagging, random forests, and boosting
[4]	Minimum temperature, maximum temperature, rainfall	Multiple Linear Regression
[5]	Temperature, air pressure, relative humidity, vapor pressure, wind speed	Bayesian
[6]	Maximum humidity, average humidity, rainfall	Naïve Bayes
[7]	Temperature, wind speed, wind direction, humidity, atmospheric pressure, rainfall	Multiple Linear Regression
[8]	Maximum temperature, minimum temperature, evaporation, wind speed, cloud cover	J48, ANN, dan Naïve Bayes

2.4. Provisions of Writing Equations

Each equation is written in the middle of the column and given a number written in brackets and placed at the end of the right margin. Equations must be written using Equation Editor in MS Word or Open Office, like the example in Equation 1.

$$Entropy(S) = \sum_{i=1}^c -p_i \log_2 p_i \quad (1)$$

2.5. Citations and Reference List

Author must write the source of the reference in their writings. All references referred to in the article text must be registered in the Bibliography section. Bibliography must contain reference libraries originating from at least 80% of primary sources, namely scientific journal articles, proceedings, research reports, reference books (not popular books) and other primary sources. The primary

reference is published no later than 5 (five) years. Bibliography contains at least 15 (fifteen) reference libraries.

Bibliography is written using the IEEE (numbered) format. The order of bibliography is based on the order in which they appear in the paragraphs of the manuscript. Writing a bibliography should use reference management applications such as Mendeley, End Note, Zotero, or others.

References or citations are inserted in paragraphs using the IEEE (numbering) format with the following conditions. The numbers for each reference item are written in square brackets, for example [1]. Some references can be written with separate square brackets, for example [2], [4], [6], and [7]. Sequential references are written with a dash (-), for example in [1-3], [15-17]. A detailed explanation of the IEEE citations format and writing of the reference list can be found at <https://www.ieee.org/documents/ieeecitationref.pdf>.

2.6. Transfer of Manuscripts Copyright

Authors who submit manuscripts must understand that if accepted for publication, the copyright of the article belongs to IJOSBIE and the Science and Engineering Research Centre, Universitas PGRI Semarang as a journal publisher. This copyright transfer policy is set out in the Copyright Notice. The author must send a Copyright Transfer Agreement (CTA) to the editor of IJOSBIE via email. CTA forms can be downloaded at the journal website.

3. Results and Discussion

This chapter lays out specific instructions for writing the full text, including the article section, the systematic chapter and its contents. These specific instructions will guide the entire editorial process of the article as shown in Figure 2.

3.1. Systematics of the Article

Article title: The title of the article must be written briefly and clearly and must indicate exactly the problem to be raised, not to allow a variety of interpretations, written in small letters and in the middle of the paragraph. Article titles may not contain abbreviations that are not commonly used. The main idea of the article put forward first and then followed by other explanations.

Abstract: Abstract is written in English. The number of words is limited to a maximum of 150. Abstracts should be as concise as possible, accurate and clear and describe the research you are doing and confirm the results of key research / development. Keywords are 3-5 keywords inserted after the abstract and each keyword is separated by a comma (,).

Introduction: The introduction must contain (sequentially) general background, previous literature studies (state of the art) as a basis for the statement of scientific renewal of the article, gap analysis of what has been produced by previous research, and a statement of the importance of the research carried out. At the end of the introduction the explicit purpose of the article should be stated. In the scientific article format it is not permissible to review the literature as in the research report, but is manifested in the form of previous literature studies (state of the art) to show what the focus of the research is, what is lacking, why this research is important and the purpose of the research The writer did. Authors must avoid unnecessary duplication / repetition of explanations on the work of themselves / others that have been published.

Research methods: The research method explains the stages of research or development carried out to achieve the research goals / objectives. Each stage is briefly explained, for example each stage in one paragraph. The materials / platforms / platforms used in research are described in this chapter, which includes the subject / material being studied, tools / software used, experimental design or design used, sampling techniques, test plans (variables to be measured and techniques take data), analysis and statistical models used.

Results and discussion: The results and discussion contain the results of research / development findings and their scientific discussion. Scientific findings (scientific finding) obtained from the results of research conducted have been described in this chapter but must be supported by adequate data. The scientific findings referred to here are not the research data obtained (can be attached as supplementary files). Scientific findings must be explained scientifically include: Are scientific findings obtained? Why does that happen? Why are variable trends like that? All of these questions must be explained scientifically, not only descriptive, if necessary supported by adequate basic scientific phenomena. In addition, it should be explained its relationship with existing concepts and comparison with previous studies, whether the research results are appropriate or not, getting better or not and other aspects.

Conclusions: Conclusions are sufficient to state the answers to the hypotheses and / or research objectives stated in the introduction. The conclusion does not contain a repeat of the results and discussion, but rather a summary of the findings as expected in the objectives or hypotheses. If necessary, at the end of the conclusion can also be written things that will be done related to further ideas from the research.

Acknowledgments: Acknowledgments are primarily addressed to research funders or donors. Acknowledgments can also be conveyed to those who helped carry out the research. Lecturers / researchers listed in the author list do not need to be thanked in this section.

Bibliography: Bibliography must contain reference libraries originating from at least 80% of primary sources, published no later than 5 (five) years, and at least contain 15 (fifteen) references with IEEE format.

3.2. Instructions for Submitting Manuscripts Online

Manuscripts must be submitted online with the following procedure:

1. Manuscript submission is done by the Online Submission System in the E-Journal portal (<http://journal.upgris.ac.id/index.php/ijosbie>)
2. First the writer registers as a writer is (tick role as Author) when "Register" <http://journal.upgris.ac.id/index.php/ijosbie>
3. After the author is logged in as Author, the author presses the "New Submission" button. The stages of article submission consist of 5 stages, namely: (1). Start, (2). Upload Submission, (3). Enter Metadata, (4). Upload Supplementary Files, (5). Confirmation
4. In the Start section, the author chooses the Journal Section (Full Article) and checks all the checklist.
5. In the Upload Submission section, the author uploads the article file in MS Word in this section.
6. In the Enter Metadata section, the author enters the data of all the Authors and their affiliates, followed by the title and abstract, and indexing keywords.
7. In the Upload Supplementary Files section, the author is allowed to upload supporting data files, cover letters or other documents.
8. In the Confirmation section, the author presses the "Finish Submission" button if all data is correct.
9. If the writer has difficulty in sending the manuscript through the online system, manuscript manuscripts can also be sent via E-mail to the IJOSBIE Editorial email (ijosbie@upgris.ac.id), however this method is not recommended.

4. Conclusion

The conclusions describe the answers to the hypotheses and / or research objectives or scientific findings obtained. The conclusion does not contain a repeat of the results and discussion, but rather a summary of the findings as expected in the objectives or hypotheses. If necessary, at the end of the conclusion can also be written things that will / need to be done related to further ideas from the

research. Conclusions are stated as paragraphs. Numbering or itemizing are not permitted in this chapter. Subsections (for example 4.1 Conclusions, 4.2 Suggestions) are also not permitted in this chapter.

Acknowledgements

This section expresses its gratitude to those who have a role in conducting research activities, for example the laboratory where the research is conducted. The role of donors or those supporting research is briefly mentioned. Lecturers who are writers do not need to be listed here.

References

- [1] K. Kar, N. Thakur, and P. Sanghvi, "Prediction of Rainfall Using Fuzzy Dataset," 2019.
- [2] N. Z. M. Safar, A. A. Ramli, H. Mahdin, D. Ndzi, and K. M. N. K. Khalif, "Rain prediction using fuzzy rule based system in North-West Malaysia," *Indones. J. Electr. Eng. Comput. Sci.*, vol. 14, no. 3, pp. 1572–1581, 2019.
- [3] C. Choi, J. Kim, J. Kim, D. Kim, Y. Bae, and H. S. Kim, "Development of heavy rain damage prediction model using machine learning based on big data," *Adv. Meteorol.*, vol. 2018, 2018.
- [4] E. Sreehari and S. Srivastava, "Prediction of Climate Variable using Multiple Linear Regression," in *2018 4th International Conference on Computing Communication and Automation (ICCCA)*, 2018, pp. 1–4.
- [5] V. B. Nikam and B. B. Meshram, "Modeling rainfall prediction using data mining method: A Bayesian approach," in *2013 Fifth International Conference on Computational Intelligence, Modelling and Simulation*, 2013, pp. 132–136.
- [6] S. Navadia, P. Yadav, J. Thomas, and S. Shaikh, "Weather prediction: a novel approach for measuring and analyzing weather data," in *2017 International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud)(I-SMAC)*, 2017, pp. 414–417.
- [7] N. Anusha, M. S. Chaithanya, and G. J. Reddy, "Weather Prediction Using Multi Linear Regression Algorithm," in *IOP Conference Series: Materials Science and Engineering*, 2019, vol. 590, no. 1, p. 12034.
- [8] N. W. Zamani and S. S. M. Khairi, "A comparative study on data mining techniques for rainfall prediction in Subang," in *AIP Conference Proceedings*, 2018, vol. 2013, no. 1, p. 20042.