Research Article

Title

Firstname Lastname ¹, Firstname Lastname ², and Firstname Lastname ²,*

¹ Affiliation 1; e-mail : xxx@xxx.com
² Affiliation 2; e-mail : xxx@xxx.com
* Corresponding Author : name

Abstract: A single paragraph, maximum 200 words. Abstract content must contain (1) an overview of the object of research, (2) problems, and research objectives, (3) proposed methods, (4) main findings and results and synthesis of main ideas, and (5) conclusions.

Keywords: Enter five keywords and separate them with a semicolon (;)

0. How to Use This Template

Each section has a corresponding style, which can be found in Word's "Styles" menu. Use a Style menu like Fig. 1.

Figure 1. Style menu in MS Word.

1. Introduction

The Journal of Computing Theories and Applications only accepts research paper submissions that contain at least 3000 to 8000 words or around 8 to 20 pages. The introduction must be written briefly, concisely, and clearly. The introduction must contain an explanation of (1) the Research object, (2) Methods that have been used previously, (3) the Weaknesses and strengths of each method or may briefly allude to related work and/or hypotheses, (4) Research problems (5) Proposed solutions and/or approaches (6) List of Contributions (6) Rest of paper. The introduction section must be scientific and rich in citations. Use "maintext_JCTA" style for this paragraph.

2. Preliminaries or Related Work or Literature Review

This section must contain a state-of-the-art explanation. It can be explained in several ways. First, you can discuss several related papers, both about objects, methods, and their results. From there, you can explain and emphasize research gaps or differences in your research with previous research. The second way, you can combine theory with related literature and explain each theory in one sub-chapter.

2.1. Subsection 1

2.2 Subsection 2

3. Proposed Method

In this section, you need to describe the proposed method step by step. Explanations accompanied by equations and flow diagrams as illustrations will make it easier for readers to understand your research.

3.1. Algorithm/Pseudocode

Writing algorithms or pseudocode can be an alternative for explaining scientific paper content. The algorithm must be cited in the main text. Below is an example of writing an Algorithm. You need to use "Algorithm_head_JCTA" and "algorithm_step_JCTA" styles.

Algorithm 1. Algortihm Title

INPUT: xxx, yyy
OUTPUT: zzz
 1: Step 1
 2: Step 2
 3: Step 3
 4: Step n

3.1.1. Subsubsection

Bulleted lists look like this:

- First bullet;
- Second bullet;
- Third bullet.

Numbered lists can be added as follows:

1. First item;
2. Second item;
3. Third item.

The text continues here.

3.2. Formatting of Mathematical Components

Equations, theorems, and proofs must be cited in the main text. For example, the author could write the sentence: "Eq. (1) is used to calculate blablabla". This is example 1 of an equation:

$$a = 1, \tag{1}$$

the text following an equation need not be a new paragraph. Use "punctuate_text_JCTA" style.
This is example 2 of an equation:

$$a = b + c + d + e + f + g + h + i + j + k + l + m + n + o + p + q + r + s \tag{2}$$

the text following an equation need not be a new paragraph. Use "punctuate_text_JCTA" style.

Theorem-type environments (including propositions, lemmas, corollaries etc.) can be formatted as follows:

Theorem 1. *Example text of a theorem. Theorems, propositions, lemmas,* etc. *should be numbered sequentially (i.e., Proposition 2 follows Theorem 1). Examples or Remarks use the same formatting, but should be numbered separately, so a document may contain Theorem 1, Remark 1 and Example 1.*

The text continues here. Proofs must be formatted as follows:

Proof of Theorem 1. Text of the proof. Note that the phrase "of Theorem 1" is optional if it is clear which theorem is being referred to. Always finish a proof with the following symbol.

The text continues here.

4. Results and Discussion

In this section the author needs to explain the hardware and software used, dataset sources, initial data analysis, results, and results analysis/discussion. Presenting the results with pictures, graphs and tables is highly recommended. Formulas or evaluation measuring tools also need to be included here. There must be discussion/analysis, and you can't just rewrite the results in sentence form, but you need to provide an explanation of their relationship to the initial hypothesis. In addition, this section needs to discuss and elaborate on important findings.

4.1. Figures and Tables

Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table heads should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation "Fig. 1", even at the beginning of a sentence.
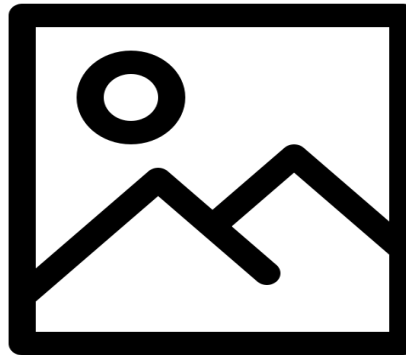

Figure 2. This is a figure. Schemes follow the same formatting.

Table 1. This is a table. Tables should be placed in the main text near to the first time they are cited.

Title 1	Title 2	Title 3
entry 1	data	data
entry 2	data	data
entry 3	data	data
entry 4	data	data
entry 5	data	data
entry 6	data	data
entry 7	data	data [1]

[1] Tables may have a footer.
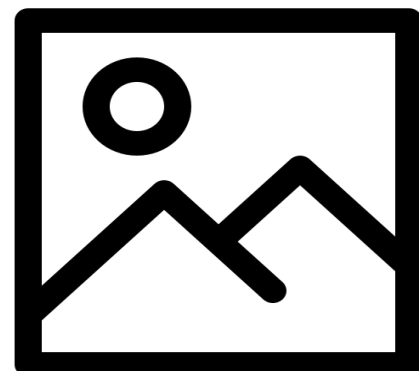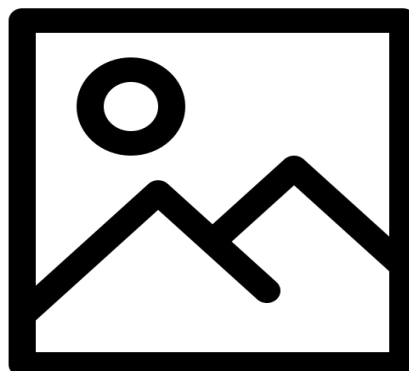
The text continues here (Figure 2 and Table 2).

Figure 3. This is a figure. Schemes follow another format. If there are multiple panels, they should be listed as (**a**) a Description of what is contained in the first panel; (**b**) a Description of what is contained in the second panel. Figures should be placed in the main text near the first time they are cited.

Table 2. This is a table. Tables should be placed in the main text near the first time they are cited.

Title 1	Title 2	Title 3	Title 4
entry 1 *	data	data	data
	data	data	data
entry 2	data	data	data
	data	data	data
entry 3	data	data	data
	data	data	data
entry 4	data	data	data
	data	data	data

* Tables may have a footer.

5. Comparison

Comparison with state-of-the-art is an important part. This section can provide a more measurable illustration of your research contribution. This section can also be added to a brief discussion. If you feel that this section is insufficient and unsuitable to be a separate section, the author(s) can integrate this section with section four (Results and Discussion).

6. Conclusions

Sections must summarize briefly and concisely the contents of the document or essay. This section may contain (1) A summary of the main results, findings, and evidence from your research or analysis. (2) Synthesis of findings, namely the relationship between findings and research objectives, and show how these findings support arguments or hypotheses. (3) The author may also be able to discuss the implications of research findings for research benefits. What is the contribution or impact on the field of knowledge or topic discussed? (4) Limitations and suggestions for further research.

Conflicts of Interest: Declare conflicts of interest or state **(mandatory)**, "The authors declare no conflict of interest." Authors must identify and declare any personal

circumstances or interests that may be perceived as inappropriately influencing the representation or interpretation of reported research results. Any role of the funders in the study's design; in the collection, analyses or interpretation of data; in the writing of the manuscript; or in the decision to publish the results must be declared in this section. If there is no role, please state, "The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results".

Appendix A

The appendix is an optional section that can contain details and data supplemental to the main text—for example, explanations of experimental details that would disrupt the flow of the main text but nonetheless remain crucial to understanding and reproducing the research shown; figures of replicates for experiments of which representative data is shown in the main text can be added here if brief, or as Supplementary data. Mathematical proofs of results not central to the paper can be added as an appendix.

Appendix B

All appendix sections must be cited in the main text. In the appendices, Figures, Tables, etc. should be labeled starting with "A"—e.g., Figure A1, Figure A2, etc.

References

References must follow the IEEE style. We recommend preparing references with a bibliography software package, such as Mendeley, EndNote, or Zotero to avoid typos and duplicate references. **Must be include digital object identifiers (DOIs) for all references where available. It is important to do a lookup based DOI (if any) on the reference manager, see Figure 5.**

[1] D. R. I. M. Setiadi, S. Rustad, P. N. Andono, and G. F. Shidik, "Digital image steganography survey and investigation (goal, assessment, method, development, and dataset)," *Signal Processing*, vol. 206, p. 108908, May 2023, doi: 10.1016/j.sigpro.2022.108908.

[2] D. R. I. M. Setiadi, T. Sutojo, E. H. Rachmawanto, and C. A. Sari, "Fast and efficient image watermarking algorithm using discrete tchebichef transform," in *2017 5th International Conference on Cyber and IT Service Management (CITSM)*, Aug. 2017, pp. 1–5. doi: 10.1109/CITSM.2017.8089229.

[3] A. Vyas, S. Yu, and J. Paik, "Fundamentals of Digital Image Processing," in *A John Wiley & Sons*, 2018, pp. 3–11. doi: 10.1007/978-981-10-7272-7_1.

[4] ICCC FBI, "Internet Crime Report 2021," 2022. [Online]. Available: https://www.ic3.gov/Media/PDF/AnnualReport/2021_IC3Report.pdf

[5] USC Viterbi School of Engineering, "SIPI Image Database." http://sipi.usc.edu/database/ (accessed Mar. 27, 2019).

Use at least 20 references from journal articles or conferences from related prior art. References from books are better used in general theories. Avoid references from the website, except for data reports or dataset sources, or other data sources.
After doing the citation correctly, insert the bibliography then **use the "References_JCTA" Style, see Fig. 4.**
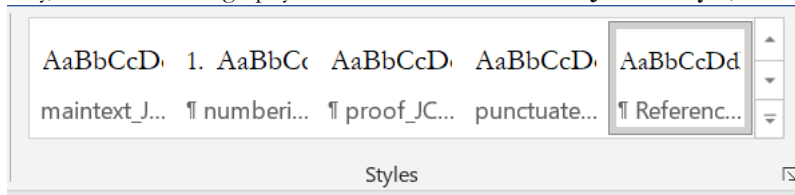

Figure 4. Use "References_JCTA" Style for Bibliography

The author can use the lookup button function so that the journal data matches, apart from that, the author also needs to check whether the author name, title name, and journal name are correct. As an example of the Mendeley software, you can see Fig. 4 as an illustration As an example of the Mendeley software, you can see Fig. 5 as an illustration.
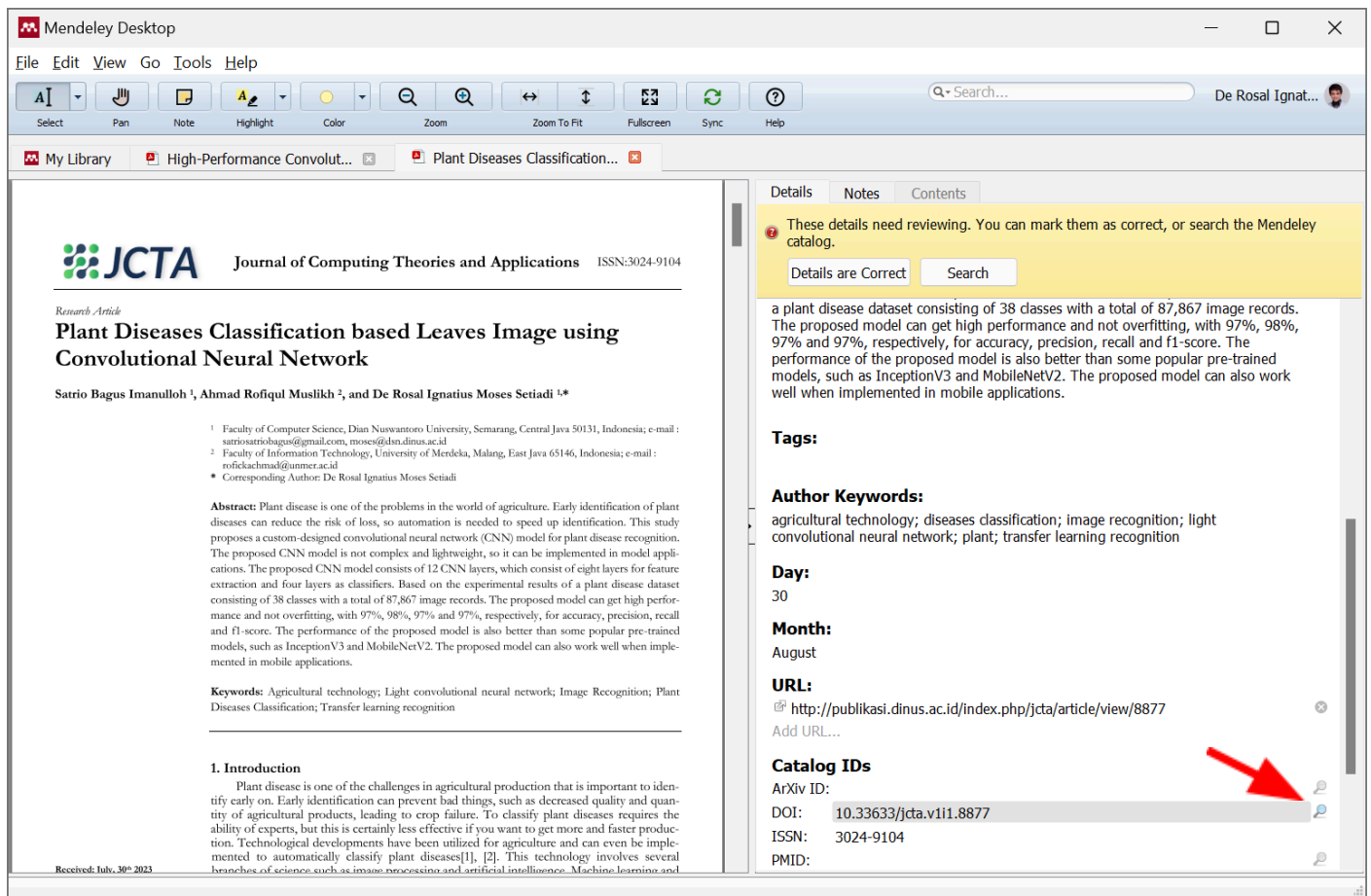
Journal of Computing Theories and Applications 2024 (month)*, vol. xxx, no. xxx,* Last name Author of First Author, et al.

6 of 6

Figure 5. DOI lookup button in Mendeley Software