

Applied Systems and Technologies Journal (ASTJ)

Written Using the AST Journal Template

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Abstract- The abstract should provide prospective readers with a clear summary of the research, including its purpose and key findings. It must contain: a brief background explaining the importance of the study (if applicable, limited to 2–3 sentences), a clear and concise statement of the objectives, a brief description of the methods, the final results or findings (not the discussion), and the conclusion.

Keywords: keyword1; keyword2; keyword3; keyword4; keyword5

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1. Introduction

The introduction section sets the stage for your study by providing context, defining the problem, highlighting its significance, and outlining your contribution. It should engage the reader, establish the relevance of your work, and clearly articulate the objectives of the research.

The introduction establishes the foundation for your entire paper and should engage the reader while clearly establishing the context and purpose of your research [1]. When writing your introduction [2], address these key questions: What is the background and context of this research? What previous work has been done in this area? (Provide a brief literature review), What gap or problem does your study address? Why is this research needed? What are your specific research objectives or questions?

Begin with broader concepts and gradually narrow to your specific research focus. The introduction typically comprises 1-1,5 pages and should include context and background, problem statement, significance of the problem, literature review (brief), research objective, and contributions [3].

2. Methods

The methods section provides a detailed, clear, and reproducible description of how you designed, implemented, and evaluated your model. The methods section should provide

sufficient detail to allow other researchers to reproduce your work [4], [5].

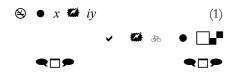
Describe your research methodology clearly and systematically [6]. Key components of the methods section: Provide a high-level summary of your proposed method or model, including its key innovation or contribution. Specify the dataset(s) used for training, validation, and testing. Describe the structure of your model in detail. Use diagrams or equations where appropriate to clarify complex architectures. List the metrics used to assess model performance. Include diagrams, flowcharts, or tables to illustrate the model architecture or experimental setup.

3. Result

This section describes how to write a formula, how to prepare tables, pictures and graphics, how to write author names and affiliations, and how to write citations. This technicalities will result in a consistently formatted manuscript and speed up the editorial process.

1. Writing a formula

Formula (1) below shows an example of writing a formula (use style: inf_equation). The paragraph is centered (center alignment) but it has two tabs, which control the placement of the formula itself and the numbering, respectively. Numbering is placed on the right side of the paragraph using Arabic numeral.



Do not put screenshot image as a formula. You need to write a formula using any tool provided by word processors.

2. Writing a table, picture and graph

Table 1. Caption of my table

Column .	Column title (table col head)		
	Column subtitle	(table col subhead)	subtitle
content	table content (table copy)		
content	table content		

Table 1 shows how to write a table into your manuscript. All tables should be numbered and has a short description (caption) above it. The whole table is bordered on the top and bottom. Horizontal line is used to separate column heading and table content, and also to separate column heading and subheading. No vertical line should be used.

Pictures or graphs may be put inside a text box and the caption is written below the text box (see Figure 1).

Pictures and graphs should be put inside a text box. The caption is put below the text box.

Unlike this example, you do not need to draw borders for the text box.

Figure 1. Caption of my figure (inf_figureCaption)

If your picture/graph is large in size and the width is larger than the size of one half-page column, it can be placed into a full-page column (see Table 2 as an example). This is how to insert a section of full-page column in between the normal two-column page:

- 1. Insert a section break (continuous)
- Write something and change the column format to one column.
- 3. Insert another section break (continuous)
- 4. Change the column format into two columns.

Detailed technique for each step can be different for one word processor from another, even from one version to the other. However, a good word processor, such as Microsoft Word and LibreOffice Writer, has the facility to make continuous section break.

3. Writing author names and affiliation

Author names need to be written in full without title and academic degree. If there are more than one author, one of them will be the corresponding author, whose name is written followed by an asterisk. If there are more than one author and they are from different affiliations, names are followed by a number that resembles each affiliation. One number is for one affiliation. The number is written in superscript, so is the asterisk for the corresponding author.

Information for affiliation includes name of department (or division), name of institution, and city. Name of country may be added if necessary. An email address is written for the corresponding author.

Table 2. Example of a table (or a picture/graph) that extends beyond one column and fills the whole width of page

Column title		Column title (table col he	ad)
	Column subtitle	Column subtitle	Column subtitle
text	text (table copy)		
text	text		

4. Writing citations and list of reference

Citations and referencing follows IEE style [1]. Citation is numbered in the order of occurrence in the text. It uses Arabic numeral enclosed with square brackets [2]. We recommend the use of bibliographic software, preferably Mendeley when you write manuscripts and insert citations [3]–[5], so that citation management get easier. Several open source bibliographic software may be obtained without payment or with a very low cost [4], [6]. There is basically no limit to the minimum or maximum number of citations, but a manuscript of 5 – 6 page length should contain more than 20 reference that cite recently published papers from international journals.

4. Results and Discussion

The results and discussion section presents your findings and interprets their significance [11]. This section forms the core of your paper and should directly address your research questions [12]. Organize your results logically, moving from major to minor findings, or chronologically if appropriate.

When presenting results: Use tables and figures to display complex data efficiently. Describe patterns, trends, and key observations in the data. Compare your findings with previous research. Explain unexpected or contradictory results. Discuss the implications of your findings for theory and practice. Address limitations of your study. Suggest directions for future research.

5. Conclusion

The conclusion section summarizes the key findings, highlights the significance of the work, and provides a concise closure to the study. It should be succinct, avoid introducing new information, and reinforce the contributions of your research while pointing to future directions.

The conclusion synthesizes your key findings and articulates their broader significance. This section should: Summarize the main results without introducing new data. Directly address how your findings answer your research questions. Highlight the original contribution your work makes to the field. Discuss practical applications or theoretical implications.

We strongly recommend that you write your conclusion in one paragraph (not in bullet points) and keep it to around 250-350 words.

Acknowledgement

Acknowledgements should be included in a paragraph of no more than three lines regarding the conflict of interest and the institution that supported or funded the research. For example: "This work was supported by a research grant from the National Science Foundation [Grant No. 1234567]" or "The author declares no conflict of interest. This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors."

Acknowledgments to supervisors or institutionally affiliated individuals due to position are not allowed.

Reference

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