Paper Title

First Author 1, Second Author 2\*, Third Author 3

1 *First Department,* First University*,* Address*, City, Country Name*

2 Second Company Department, Company Address, City, Country Name

3 Third Department, Third University, Address, Country Name

\* Corresponding Author: corresponding.author@second.com

Abstract: A brief manuscript preparation scheme for the 4rd Conference on Applied Research in Electrical Engineering (AREE2024) is presented in this document. The current form of this manuscript serves as a good representation of the required formatting, and should be used as the conference’s template. The required styles and page formatting are created and embedded in this document. The abstract should be informative and suitable for direct inclusion in abstracting services as a self-contained article. It should not exceed 250 words. It should summarise the general scope and also state the main results obtained, methods used, the value of the work and the conclusions drawn. No figure numbers, table numbers, references or displayed mathematical expressions should be included in the Abstract.

**Keywords:** 3 to 6 keywords must be supplied.

1. Introduction

This document is the main template advised to the author(s) for preparing the manuscript for the 3rd Conference on Applied Research in Electrical Engineering (AREE2024). The desired styles have already been created and the manuscript text can directly be inserted into this document. In case the authors choose not to utilize the provided template, the manuscript formatting requirements are presented in the following sections. On this basis the authors must ensure the entire prepared manuscript matches the desired formatting requirements. If the submitted manuscript fails to meet the conference requirements, you will be asked to fix it. This includes text styles, page formatting, prepared equations, figures, tables and referencing or even author(s) affiliations.

The prepared manuscript must at least contain sections such as the Title, Abstract, Introduction, Conclusion and References. Otherwise, the paper will be returned to the authors for mandatory corrections. The Acknowledgements section is optional unless funding is available. In such conditions, the Acknowledgements section should be added and must contain the listed funding items.

To ease the understanding of the readers, sections could be added to this classification. On this basis, the general structure of the paper will be discussed and requirements of each section will be presented.

1. Text Organization

The manuscript text must be written in English using the “Times New Roman” font type. The main text should be in standard size 10pts “Times New Roman” font. Table 1 provides samples of the appropriate type sizes and styles to use. The main paper sections must be organized as follows:

**Table 1:** Samples of Times New Roman type sizes and styles used for formatting a paper for AREE2024

|  |  |  |
| --- | --- | --- |
| Purpose in Paper | Font Size (pts) | Font Style |
| Title | 18 | Bold |
| Author(s) name | 12 | Bold |
| Author(s) affiliation | 10 | Italic |
| Abstract | 10 | Bold |
| First level section headings | 10 | Bold (all caps) |
| Second level section headings | 10 | Bold |
| Third level section headings | 10 | Italic |
| Keywords, body text, figure captions, table captions, equations, references, biographies | 10 | Regular |
| Table text, figure text | 9 | Regular |

* 1. Title

The title is the main heading of the paper. The title is placed in the top center of the first page with all the important words capitalized in “Times New Roman” bold sized 18pts font. This has been embedded in the “AREE Title” style.

The title is the first part of the paper that attracts the attention of possible readers. On this basis it should be illustrative and clearly state the general aspects covered in the paper. No complete sentences must be utilized in the title. Using Abbreviations in the title is not acceptable in AREE2024, unless for widespread and well-known terms such as “THD”, “RMS”, etc. Also, the title shall not start with prepositions such as “by”, “at”, “on”, etc. It should also be mentioned that the title must not exceed three lines.

* 1. Affiliations

The author name(s) are to be mentioned immediately after the title of the manuscript using the “Times New Roman” font in bold form and 12 pts font size. The names should not contain any form of titles (e.g. CEO, Dr, member of …). Having the first name spelled out and the surname mentioned last, the full name(s) must match the following form: (e.g. Ralph N. Elliott).

With the corresponding author marked with a “\*”, the complete affiliations are listed after the author name(s) using the italic form of “Times New Roman” font and 10 pts font size. If the affiliation of all the authors is not the same, each author is linked to its corresponding affiliation using a number (e.g. Ralph N. Elliott1, Robert R. Prechter2). Each individual affiliation must be listed at a separate line (as a new paragraph). Listing all the affiliations in a single paragraph is not recommended.

The affiliations should contain the department name, the faculty name, the university (or company) name, the city name and the country name (e.g. Department of Electrical Engineering, Faculty of Engineering, Shahid Chamran University of Ahvaz, Ahvaz, Iran). At the end of the affiliations list, the corresponding author’s email address should be provided and marked with a “\*”.

* 1. Abstract

The abstract should briefly express all the topics covered in the paper. Since the abstract might be one of the main sections used as a representative of the paper, it should exhibit the general hypothesis supporting the manuscript. It should also summarize the novelty of the work, the proposed approaches, the obtained results and the conclusions drawn. Hence, the abstract should not contain any form of referencing, figures, equations or even table numbers. Being limited to 250 words or two paragraphs, the abstract is to be typed in 10pts “Times New Roman” font size and bolded out. The corresponding style, “AREE Abstract” is created and embedded in the styles list.

* 1. Keywords

Keywords are essential and can be used as supplementary information along with the title and the abstract in the abstracting services. In this regard, 3 to 6 keywords should be provided by the author (s) to help future readers better identify the main aspects covered in the manuscript. Keywords are placed immediately after the abstract in the order of importance and typed in “Times New Roman” font sized 10 pts.

* 1. Introduction

Descriptions regarding the under-study problems should be discussed in the introduction section. In the research papers, after identifying the research gap, the attempts to fill this gap must be individually cited in brief and discussed. Group citations are strictly forbidden in this conference and each citation, even in brief, must be followed by content analysis. In review articles, the literature analysis has to be carried out thoroughly in a separate section entitled “Literature Review”, “Literature Survey” or even “Previous Work”.

Following this analysis, after listing the drawbacks of the previous research, the proposed approach, expectations and author(s) contributions should be listed.

* 1. Materials and Methods

After the introduction, the utilized principles, problem statements and the proposed methods are discussed. Based on the author(s) point of view, these can be embedded in a single section or can be divided into different sections. The text in these sections must be continuous and to ease the understanding of the readers and prevent any confusion, discussing irrelevant topics should be avoided. If necessary, these topics should be placed in the Appendix section.

* 1. Conclusions

In the conclusions section, as the last main section before the references, important aspects of the paper must be listed in 10pts “Times New Roman” font. The conclusions should also contain the novelty of the paper and the obtained results. Moreover, author(s) suggestions, research limitations and the obtained results should also be discussed in the conclusions section.

* 1. References

In the references section, the documents cited in the main text and used by the author(s) in preparing the manuscript are listed individually in separate lines. An average research paper should reference between 20 and 30 works, the bulk of which should be recently published (i.e. within the last five years) leading-edge articles in the field, preferably from top journals or conferences. Please note that tables, figures and equations should not appear in the middle of the references. If this happens, white space will be introduced to avoid items appearing in the references.

References are to be numbered individually based on the order of citation in square brackets (e.g. [1]). The reference should be referred to by its corresponding number (e.g. as mentioned in [2]), unless the citation is made at the start of a sentence, (e.g. Reference [3] indicates that …). When citing multiple references in the same sentence, the author(s) should place all references chronologically in the same pair of brackets, and separate them with a comma (e.g. [1, 2] or [1, 3, 4]). A hyphen is used where more than two references are consecutive (e.g. [1-3]).

The author(s) must ensure all the citations are listed in the reference list and vice versa. Moreover, the author(s) must provide full detail on the references in English including complete author names, paper title, publication date, journal (book) title, volume and page range. If the reference is a book or a conference paper, the town or publisher must also be included. Obviously, this information can only be supplied for an accepted/published book or paper. If the number of authors on a reference is greater than six, write the first author followed by *et al.* It is recommended to use EndNote software [4] and “IEEE” referencing style for this conference. Some examples of the recommended referencing style are presented in Section 7.

1. Page Formatting

The manuscript should be prepared in a single space double column format on A4 (8.27”×11.69”) similar to this template. The top and bottom margins must be set to 0.79" and the side margins to 0.59". Moreover, the column width and spacing must respectively be set to 3.39" and 0.32". Using full justifications and 1 or 2 spacing, the first line indention and first line spacing before paragraphs should respectively be set to 0.25" and 6 pts. Moreover, the paper length must not exceed 12 pages, otherwise the manuscript will be returned to the authors. No header or footer should be included by authors in the manuscript. However, the manuscript should be page numbered in header at the right corner of the page (as included in this template).

* 1. Main Body

To improve paper findings presentation, the author(s) divide the paper into various sections. This eases referring to the topics covered in the manuscript. These sections are separated using different headings. The text within each of these sections should be continuous and relevant to the main topic. The main body’s writing style stays the same throughout the paper and is typed in “Times New Roman” font sized 10 pts. The corresponding style, “AREE Paragraph” is created and embedded in the styles list.

* 1. Section Headings

The heading’s writing style differs corresponding to the type (level) of the heading. On this basis, the headings are categorized to three levels. The corresponding styles, “AREE Heading 1”, “AREE Heading 2”, and “AREE Heading 3” are embedded in the styles list. The section headings should be formatted as follows.

* + 1. First level section headings

The first level section headings should be placed in the center and enumerated using Arabic numbers. The numbering is separated from the heading title using a dot (.). All the words of this heading type should be capitalized and bolded out and sized 10pts along with the heading number (e.g. **1. Introduction**). The following text must start at the next line.

* + 1. Second level section headings

Second level section headings should be enumerated like **1.1.**, **1.2.**, etc. Important words should be capitalized and the heading along with the corresponding enumeration should be in bold (e.g., **2.6. Materials and Methods**). Similarly, the following text must start at the next line.

* + 1. Third level section headings

Third level section headings should be in italic font, capitalized just by the first word and enumerated like *1.1.1.*,

*1.1.2.*, etc., (e.g., *3.2.1. First level section headings*). The following text starts at the next line. The numbered heading levels should be limited to three.

1. Figures

Figures should be placed in line with the text and numbered separately based on the order of appearance in the manuscript. Figure resolutions should not be less than 300dpi. The used graphics must be suitable for printing (black and white) and online (colour) publication. For example lines graphs should clearly be distinguishable by different colours. Moreover, use dotted or dashed lines, or shapes to make them distinguishable in print (see Fig. 1). On the other hand, the

(a)

(b)

**Fig. 1:** Sample graph with blue (dotted), orange (dashed), and green (solid) lines, (a) Subfigure 1, (b) Subfigure 2.

**Fig. 2:** Sample graph spaning two columns

embedded text must be legible and the font must not be smaller than 8 pts. No symbols or units must solitarily be used to label axes. The quantity should at least be included in the labels (e.g. Voltage (V), Current (A)). Any form of labelling without the quantity is not acceptable (e.g. “V”, “p.u.”, Per unit).

Large figures may expand to both columns and should be placed on the top or the bottom of the corresponding page, but may not violate the page margins (see Fig. 2).

Figures should be numbered separately based on the order of appearance in the manuscript. Figure number is separated from the figure caption using a colon (:). Figures should be referred to as “Fig.” even at the beginning of a sentence (e.g. Fig. 1). Figure captions should respectively be placed below the corresponding figures, in 10 pts regular font. Do not put captions in "text boxes" linked to the figures. Subfigures should also have captions and should be identified by letters, (e.g. (a), (b), (c)), as demonstrated in Figs. 1a and 1b. If the figure is borrowed from another source, citing the corresponding source, especially in the figure caption must be carried out.

1. tables

Similar to figures, the tables must be placed in line with the text as close as possible after the location they are first cited. Tables should be numbered separately based on the order of appearance in the manuscript. Table number is separated from the table caption using a colon (:). Table captions must be above the tables and in 10 pts font. Tables should be formatted as shown in Table 1 with no column lines unless needed to clarify the content of the table. Row lines can be used to distinguish the column headings from the content of the table.

Large tables (e.g. tables with more than 4 columns) may expand to both columns and should be placed on the top or the bottom of the corresponding page, but may not violate the page margins. Extra-large tables (e.g. bigger than half a page) should be placed in an appendix and the appendix cited within the main body of text (e.g. “see Appendix 1 for table of results”). The table(s) can simply be referred to by the author(s) using the expression “Table” (e.g. Table 1). Similar to the figures, citing tables borrowed from other sources should at least be carried out in the table caption.

1. Mathematics and equations

The equations should strictly be created using MathType software [5] or Microsoft equations editor. Simple and small equations with a rather low importance level can be placed inside the text without enumeration (e.g. *a*=*b*+*c*). Complicated or large equations that are frequently addressed in the paper should be placed in the main text, separately, in a single column format as close as possible after the point first discussed.

Important equations must be numbered according to the order of appearance in round brackets and referred to as “(1)” not “equation (1)” or even “Eq.1” (e.g. as observed in (1)). The only exception is where a sentence is starting with a reference to an equation (e.g. Equation (2)” is …).

Symbols/variables must be defined prior to or immediately after the first appearance such as:

|  |  |
| --- | --- |
| $$S=πr^{2} $$ | (1) |
|  | (2) |

where  is the state error.

Variables should be in italic form while vectors and matrixes should be in italic form and bolded out.

Similar to large figures and tables, equations that do not fit in a single column, can be expanded to two columns and placed at the top or bottom of the page and referred to as “see (3)”.

If a specific theorem is used, it should be identified and distinguished using the expression “Theorem”, enumerated based on the order of appearance using Arabic numbers. The expression “Theorem” is separated from its corresponding number by a space and from the following text by a dash. This indication should be in “Times New Roman” bold sized 10pts font (e.g. **Theorem 1**- For all variables …). The same exists for Lemmas.

1. Conclusion

Submissions should always include the following sections: an abstract; an introduction; a conclusion and a references section. If any of the above sections are not included the paper will be unsubmitted and you will be asked to add the relevant section.

Acknowledgments

Acknowledgements should be placed after the conclusion and before the references section. This is where acknowledgments should be made to any grant numbers, individuals or institutions that have made an important contribution.

Please note that the AREE2024 does not include author biographies in published papers.

Appendices

Extra-large tables, figures, mathematical theorems or even supplementary materials can be embedded in the appendix if necessary (see Table 2). Tables and figures placed in the appendix should continue the enumeration from their actual location in the paper text.

|  |  |
| --- | --- |
| $$f\left(x\right)=a\_{0}+\sum\_{n=1}^{\infty }\left(a\_{n}\cos(\frac{nπx}{L})+b\_{n}\sin(\frac{nπx}{L})\right)+f\left(x\right)=a\_{0}+\sum\_{n=1}^{\infty }\left(a\_{n}\cos(\frac{nπx}{L})+b\_{n}\sin(\frac{nπx}{L})\right)$$ | (3) |

**Table 2:** Sample large table

|  |  |  |  |
| --- | --- | --- | --- |
| Column 1 | Column 2 | Column 3 | Column 4 |
| Data 1 | Object | Object | Object |
| Data 2 | Object | Object | Object |
| Data 3 | Object | Object | Object |
| Data 4 | Object | Object | Object |
| Data 5 | Object | Object | Object |
| Data 6 | Object | Object | Object |
| Data 6 | Object | Object | Object |
| Data 7 | Object | Object | Object |
| Data 8 | Object | Object | Object |
| Data 9 | Object | Object | Object |
| Data 10 | Object | Object | Object |

References

Examples of the correct formats for various types of references are given as:

Journal Article:

[1] B. Zhang, A. Y. Lam, A. D. Domínguez-García, and D. Tse, "An optimal and distributed method for voltage regulation in power distribution systems," *IEEE Transactions on Power Systems*, vol. 30, no. 4, pp. 1714-1726, 2015.

[2] Y. Yang, H. Li, A. Aichhorn, J. Zheng, and M. Greenleaf, "Sizing strategy of distributed battery storage system with high penetration of photovoltaic for voltage regulation and peak load shaving," *IEEE Transactions on Smart Grid*, vol. 5, no. 2, pp. 982-991, 2014.

Conference Paper:

[3] D. B. Arnold, M. Sankur, R. Dobbe, K. Brady, D. S. Callaway, and A. V. Meier, "Optimal dispatch of reactive power for voltage regulation and balancing in unbalanced distribution systems," in *2016 Power and Energy Society General Meeting*, 2016, pp. 1-5.

Website:

[4] Clarivate Analytics. (April 21, 2019). *The EndNote Guided Tour: Windows* [Online]. Available: <http://download.endnote.com/training/Little%20Book/EndNote_X9_Guided_Tour-Windows.pdf>.

[5] WIRIS. (April 21, 2019). *MathType – WIRIS – math & science* [Online]. Available: <http://www.wiris.com/mathtype>.

Book, Book Chapter and Manual:

[6] A. Ghosh and G. Ledwich, *Power quality enhancement using custom power devices*. Springer Science & Business Media, 2012.

[7] A. W. Franklin, "Management of the problem," in *The maltreatment of children*, S. M. Smith, Ed., Lancaster: MTP, 2012, pp. 83-95.

Report:

[8] E. E. Reber, R. L. Mitchell, and C. J. Carter, "Oxygen absorption in the Earth's atmosphere," Aerospace Corp., Los Angeles, CA, Tech. Rep. TR-0200 (4230-46)-3, Nov. 1968.

[9] S. L. Talleen. (1996, Apr.). The Intranet Architecture: Managing information in the new paradigm. Amdahl Corp., Sunnyvale, CA. [Online]. Available: <http://www.amdahl.com/doc/products/bsg/intra/infra/html>

Thesis:

[10] M. M. Ababneh, "Design of micro-scale energy harvesting systems for low power applications using enhanced power management system," Ph.D. Thesis, University of South Florida, 2018.

Standard:

[11] *IEEE Guide for Application of Power Apparatus Bushings*, IEEE Standard C57.19.100-1995, Aug. 1995.

Patent:

[12] J. J. Ervin, "Systems and methods for addressing memory," U.S.A. Patent US 7,013,362 B1, 2006. Available: <http://bainwoodhuang.com/wp-content/uploads/2011/04/7013362.pdf>.