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Lecture II

How to Prepare a Manuscript for International Journals or Transactions

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声明

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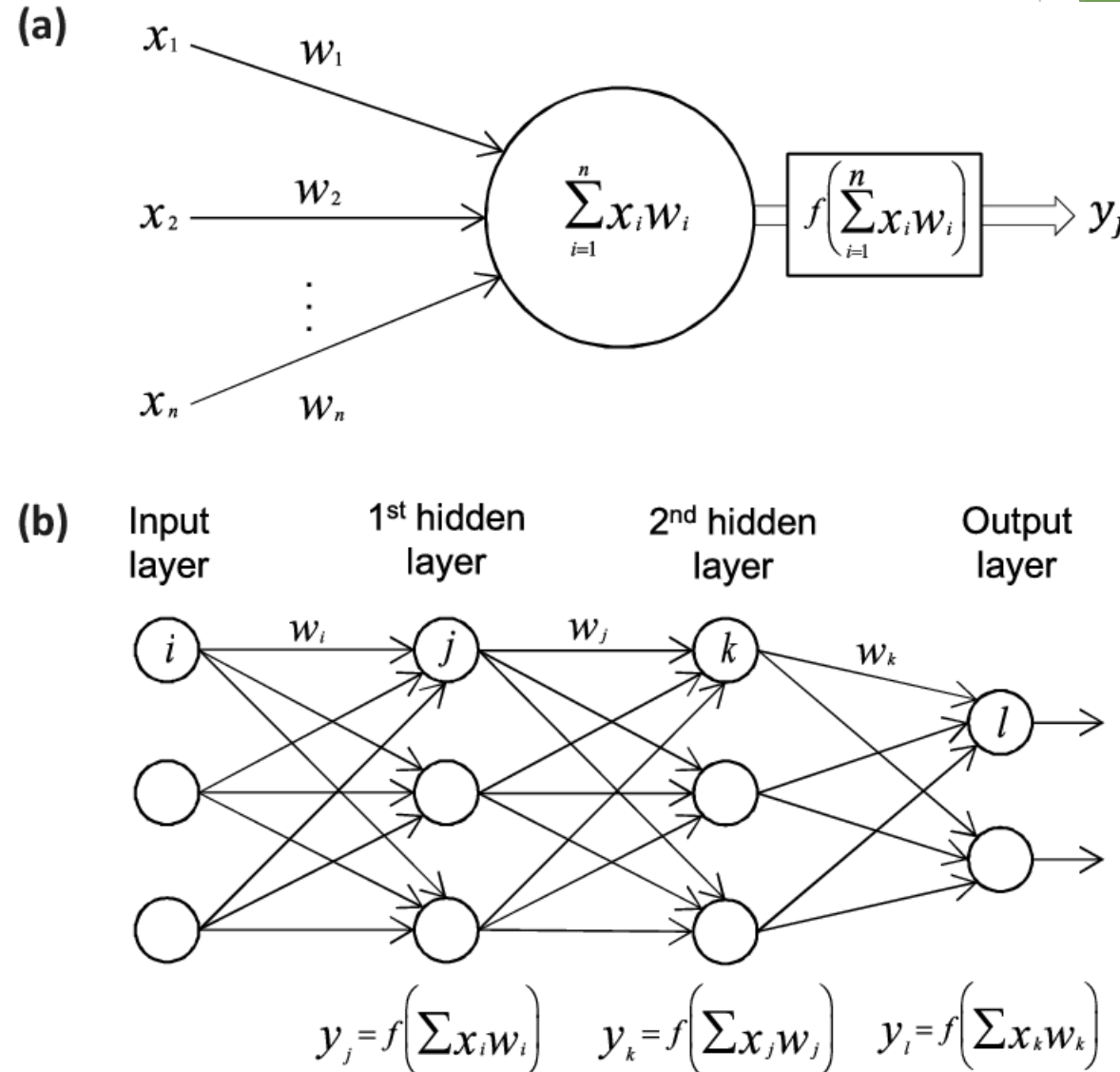
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 - ▶ IEEE Transactions on Fuzzy Systems
 - ▶ IEEE Transactions on Evolutionary Computation
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 - ▶ IEEE Transactions on Games
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► Neural Networks

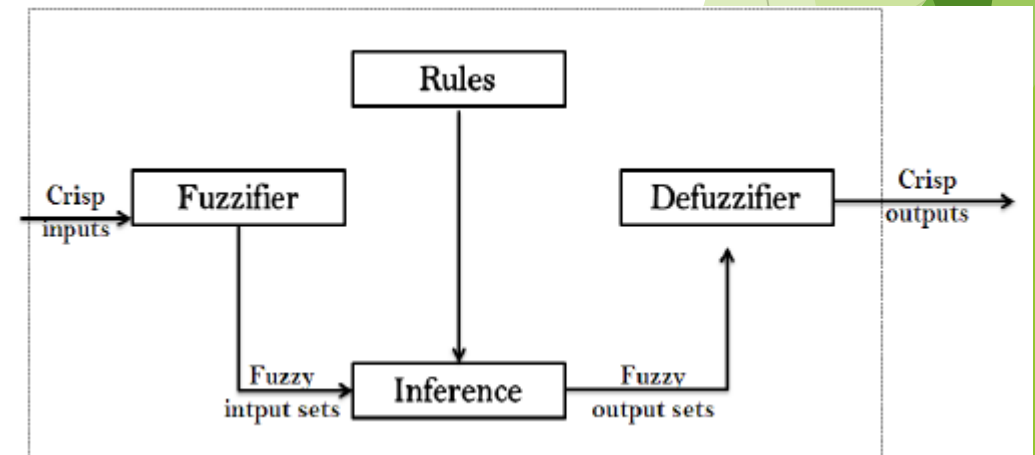
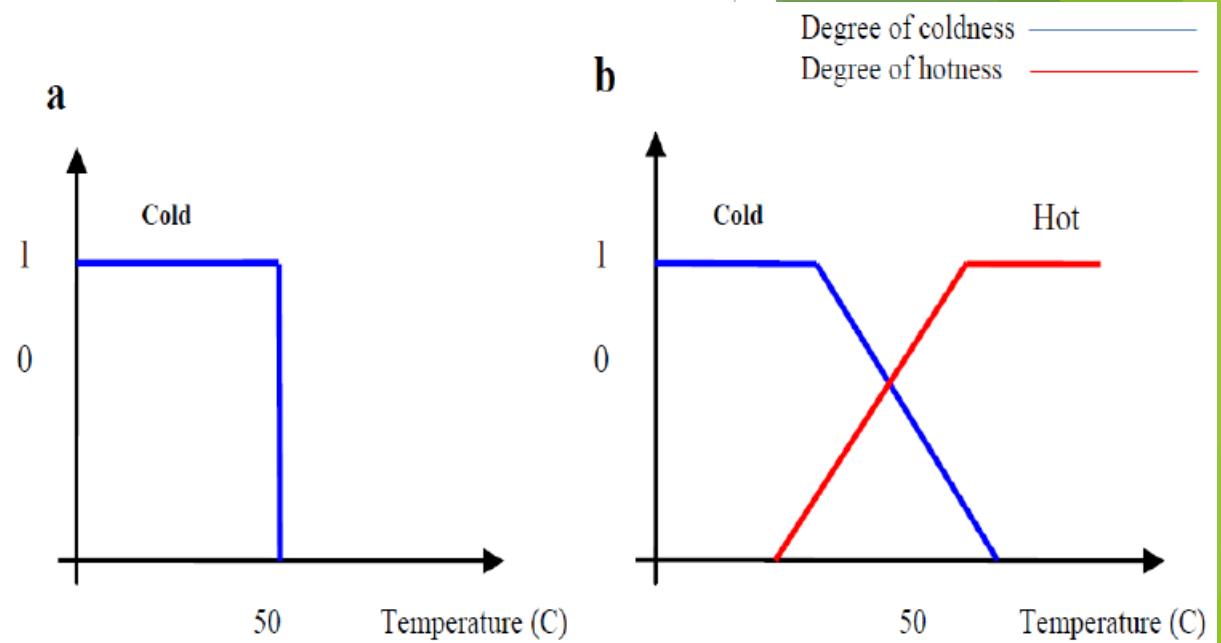
- Using the human brain as a source of inspiration, artificial neural networks (NNs) are massively parallel distributed networks that have the ability to learn and generalize from examples. This area of research includes feedforward NNs, recurrent NNs, self-organizing NNs, deep learning, convolutional neural networks and so on.



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► Fuzzy Systems

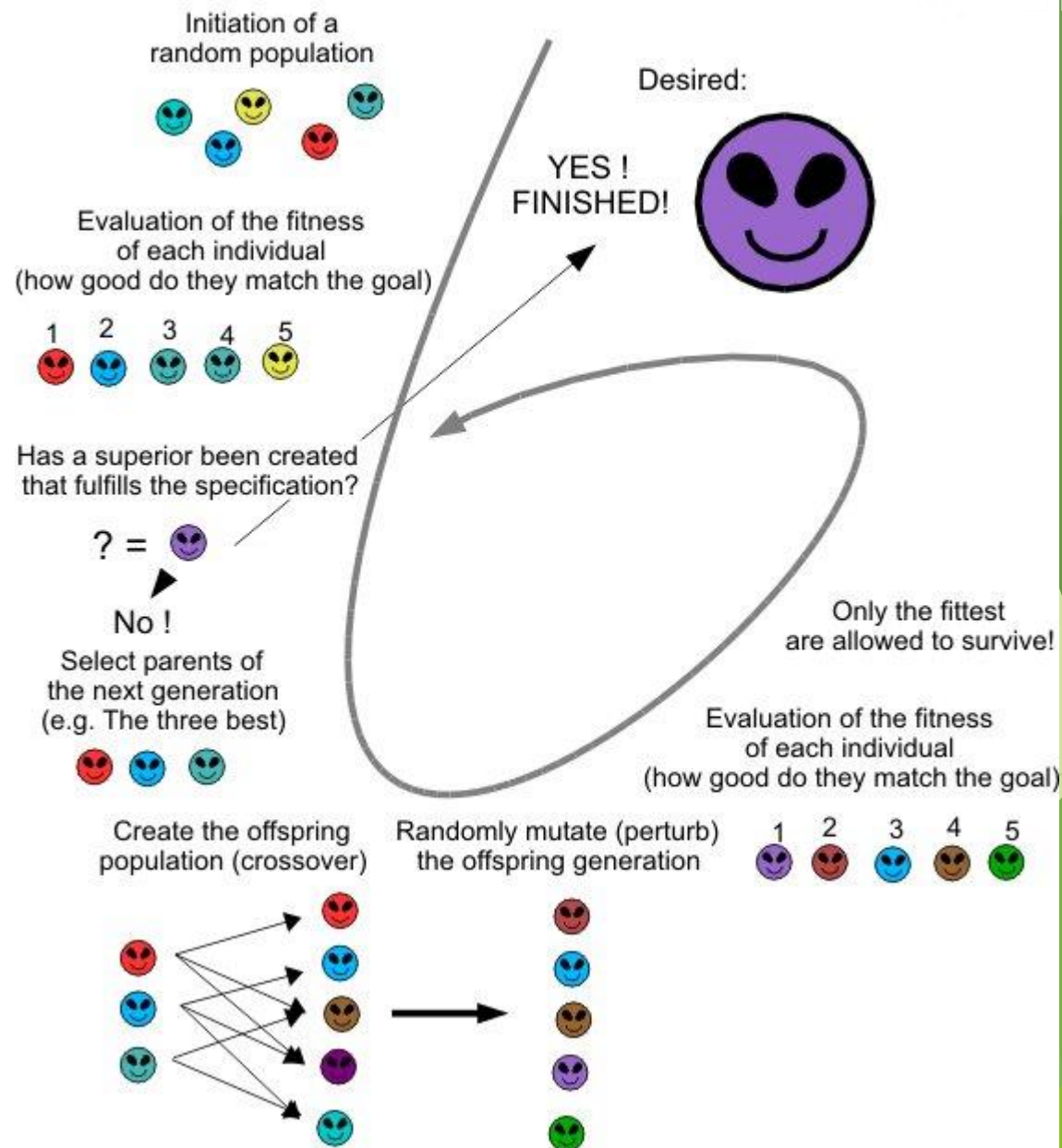
- Using the human language as a source of inspiration, fuzzy systems (FS) model linguistic imprecision and solve uncertain problems based on a generalization of traditional logic, which enables us to perform approximate reasoning. This area of research includes fuzzy sets and systems, fuzzy clustering and classification, fuzzy controllers, linguistic summarization, fuzzy neural networks, type 2 fuzzy sets and systems, and so on.



► Evolutionary Computation

- Using the biological evolution as a source of inspiration, evolutionary computation (EC) solves optimization problems by generating, evaluating and modifying a population of possible solutions. EC includes genetic algorithms, evolutionary programming, evolution strategies, genetic programming, swarm intelligence, differential evolution, evolvable hardware, multi-objective optimization and so on.

How does an Evolutionary Algorithm (EA) work ?



Paper Structure

For the title of the paper, the words are usually capitalized for the first letter, unless for function words, such as the, of, a, etc.

Suggestion about title:

- Best capture of the work of the paper
- Not necessary a full-fledged sentence
- Succinct while retaining the significance
- Compliant with and merry the convention

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 - Avoid using too negative words to comment on others' work.

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The authors detailed information. Some papers also put extra notes here, for example, the corresponding author, or declare such as equal contribution of some authors.

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1

- ▶ System configuration, environment, etc.
- ▶ Definitions of all notations for variables, symbols, etc.
- ▶ Mathematical model and formulas.

- ▶ The following methodology part usually addresses the following elements:

2

- ▶ Ideas to target the problem.
- ▶ Theorems and proofs.
- ▶ Descriptions of the approach or algorithm.
- ▶ Performance analysis.
- ▶ Uniqueness of the proposed method.

3

- ▶ The Result part covers the outcome of your application, experiment or testing:

- ▶ Description of the practical or experiment system.
- ▶ Description of the data and the associated system, such as the computing facilitates.
- ▶ Presentation of the results: table, figures, and the implied advantages, benefits.

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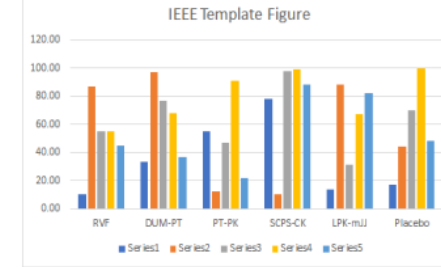


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This is intended as an authoring template, not a final production template. It is not intended to match the final published format. Differences in final formatting are likely in the final IEEE files. Page count in the template is an estimate. Do not adjust line and character spacing to fit your paper to a specific length.

A. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have already been defined in the abstract. Abbreviations such as IEEE, SI, ac, and dc do not have to be defined. Abbreviations that incorporate periods should not have spaces; write "C.N.R.S.," not "C. N. R. S." Do not use abbreviations in the title unless they are unavoidable (for example, "IEEE" in the title of this article).

III. MATH

Use either the Microsoft Equation Editor or the MathType plugin, which can be obtained from <https://store.wiris.com/en/products/mathtype/download>. For help with formatting and placing equations, refer to the *IEEE Editing Math Guide* at <http://journals.ieeeauthorcenter.ieee.org/wp-content/uploads/sites/7/Editing-Mathematics.pdf> and the *IEEE MathType Tutorial for Microsoft Word Users* at <http://journals.ieeeauthorcenter.ieee.org/wp-content/uploads/sites/7/IEEE-Math-Typesetting-Guide-for-MS-Word-Users.pdf>.

TABLE I
THIS IS A SAMPLE OF A TABLE TITLE

Name	#1	#2	#3	#4	#5
RVF	10	87	55	55	45
DUM-PT	33	97	77	68	37
PT-PK	55	12	47	91	22
SCPS-CK	78	10	98	99	88
LPI-mJJ	14	88	31	67	82
Placebo	17	44	70	100	48

A. Equations

Number equations consecutively with equation numbers in parentheses flush with the right margin of the column, as in (1). First use the equation editor to create the equation. Then select the "Equation" markup style. Press the tab key and write the equation number in parentheses. To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Use parentheses to avoid ambiguities in denominators. Punctuate equations when they are part of a sentence, as in

$$B_p + H_2 = 40. \quad (1)$$

Be sure that the symbols in your equation have been defined before the equation appears or immediately following. Italicize symbols (*T* might refer to temperature, but *T* is the unit tesla). When referring to an equation or formula, use simply "(1)," not "Eq. (1)" or "equation (1)," except at the beginning of a sentence: "Equation (1) is ..."

IV. GUIDELINES FOR GRAPHICS PREPARATION AND SUBMISSION

A. Types of Graphics

The following list outlines the different types of graphics published in IEEE journals. They are categorized based on their construction, and use of color / shades of gray:

- 1) Color/Grayscale Figures**
Figures that are meant to appear in color, or shades of black/gray. Such figures may include photographs, illustrations, multicolor graphs, and flowcharts.
- 2) Line Art Figures**
Figures that are composed of only black lines and shapes. These figures should have no shades or half-tones of gray, only black and white.
- 3) Tables**
Data charts which are typically black and white, but sometimes include color.

B. Multipart Figures

These are figures compiled of more than one sub-figure presented side-by-side or stacked. If a multipart figure is made up of multiple figure types (one part is line art, and another is grayscale or color), the figure should meet the stricter guidelines.

place table headings above the tables. Do not include captions as part of the figures, or put them in “text boxes” linked to the figures. Also, do not place borders around the outside of your figures.

L. Color Processing / Printing in IEEE Transactions, Journals, and Letters

All IEEE Transactions, Journals, and Letters allow an author to publish color figures on IEEE *Xplore* at no charge, and automatically convert them to grayscale for print versions. In most journals, figures and tables may alternatively be printed in color if an author chooses to do so. Please note that this service comes at an extra expense to the author. If you intend to have print color graphics, you will have the opportunity to indicate this in the Author Gateway and will be contacted by PubOps to confirm the charges.

V. CONCLUSION

A conclusion section is not required. Although a conclusion may review the main points of the article, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

APPENDIX

Appendices, if needed, appear before the acknowledgment.

ACKNOWLEDGMENT

The preferred spelling of the word “acknowledgment” in American English is without an “e” after the “g.” Use the singular heading even if you have many acknowledgments. Avoid expressions such as “One of us (S.B.A.) would like to thank” Instead, write “F. A. Author thanks” In most cases, sponsor and financial support acknowledgments are placed in the unnumbered footnote on the first page, not here.

REFERENCES AND FOOTNOTES

A. References

References need not be cited in text. When they are, they appear on the line, in square brackets, inside the punctuation. Multiple references are each numbered with separate brackets. When citing a section in a book, please give the relevant page numbers. In text, refer simply to the reference number. Do not use “Ref.” or “reference” except at the beginning of a sentence: “Reference [3] shows” Please do not use automatic endnotes in *Word*, rather, type the reference list at the end of the paper using the “References” style.

Reference numbers are set flush left and form a column of their own, hanging out beyond the body of the reference. The reference numbers are on the line, enclosed in square brackets. In all references, the given name of the author or editor is abbreviated to the initial only and precedes the last name. Use

them all; use *et al.* only if names are not given or if there are more than 6 authors. Use commas around Jr., Sr., and III in names. Abbreviate conference titles. When citing IEEE Transactions, provide the issue number, page range, volume number, month if available, and year. When referencing a patent, provide the day and the month of issue, or application. References may not include all information; please obtain and include relevant information. Do not combine references. There must be only one reference with each number. If there is a URL included with the reference, it can be included at the end of the reference.

Other than books, capitalize only the first word in an article title, except for proper nouns and element symbols. For articles published in translation journals, please give the English citation first, followed by the original foreign-language citation. See the end of this document for formats and examples of common references. For a complete discussion of references and their formats, see the *IEEE Editorial Style Manual for Authors* at <https://journals.ieeeauthorcenter.ieee.org/create-your-ieee-journal-article/create-the-text-of-your-article/ieee-editorial-style-manual/>.

B. Footnotes

Number footnotes separately in superscripts (Insert | Footnote).¹ Place the actual footnote at the bottom of the column in which it is cited; do not put footnotes in the reference list (endnotes). Use letters for table footnotes (see Table I).

SUBMITTING YOUR ARTICLE FOR REVIEW

A. Review Stage Using ScholarOne Manuscripts

Contributions to the Transactions, Journals, and Letters may be submitted electronically on IEEE’s online manuscript submission and peer-review system, ScholarOne Manuscripts. You can get help choosing the correct publication for your manuscript as well as find their corresponding ScholarOne Manuscripts peer review site using the tools listed at http://www.ieee.org/publications_standards/publications/authors/authors_submission.html Once you have chosen your publication and navigated to the ScholarOne site, check first to see if you have an existing account. If there is none, please create a new account. After logging in, go to your Author Center and click “Start New Submission.”

Along with other information, you will be asked to select the manuscript type from the journal’s pre-determined list of options. Depending on the journal, there are various steps to the submission process; please make sure to carefully answer all of the submission questions presented to you. At the end of each step you must click “Save and Continue”; just uploading the paper is not sufficient. After the last step, you should see a confirmation that the submission is complete. You should also receive an e-mail confirmation. For inquiries regarding the submission of your paper on ScholarOne Manuscripts, please contact oprs-support@ieee.org or call +1 732 465 5861.

¹It is recommended that footnotes be avoided (except for the unnumbered footnote with the receipt date on the first page). Instead, try to integrate the footnote information into the text.

Paper Structure

If there is sub-sections under the main section, IEEE style requires using the alphabet to organize it. But different formats from different publishers are possible

It’s the convention that a last section quickly capture the conclusion of the paper. Some may add future work in this part as well, to indicate possible subsequent work following the thread.

These two parts are optional, to have it or not is case by case. Different articles might require sections mandatory to present, and sections encourage to present.

Paper Structure

The reference part is the most complicated part of the manuscript, since different publishers tend to have different requirements. However, some fields of the reference are standardized, so, the reference management software can manage everything smoothly, such as EndNote. It seamlessly convert from one style to another. One mistake for non-native English speaker might make is for suppress the author list using etc. instead of et al.

It is worthy of pointing out that try to use the most recent references if possible and try to give complete information.

The biography used to be a de facto practice for IEEE transactions and journals. However, it is less practical due to the restriction of number of pages.

> REPLACE THIS LINE WITH YOUR MANUSCRIPT ID NUMBER (DOUBLE-CLICK HERE TO EDIT) <

[16] PROCESS Corporation, Boston, MA, USA. Intranets: Internet technologies deployed behind the firewall for corporate productivity. Presented at INET96 Annual Meeting. [Online]. Available: <http://home.process.com/Intranets/wp2.htm>

Basic format for electronic documents (when available online):
Issuing Organization. (year, month day). Title. [Type of medium]. Available: site/path/file

Example:

[17] U.S. House. 102nd Congress, 1st Session. (1991, Jan. 11). *H. Con. Res. 1, Sense of the Congress on Approval of Military Action*. [Online]. Available: LEXIS Library: GENFED File: BILLS

Basic format for patents:

J. K. Author, "Title of patent," U.S. Patent x xxx xxx, Abbrev. Month, day, year.

Example:

[18] G. Brandli and M. Dick, "Alternating current fed power supply," U.S. Patent 4 084 217, Nov. 4, 1978.

Basic format for theses (M.S.) and dissertations (Ph.D.):

J. K. Author, "Title of thesis," M.S. thesis, Abbrev. Dept., Abbrev. Univ., City of Univ., Abbrev. State, year.
J. K. Author, "Title of dissertation," Ph.D. dissertation, Abbrev. Dept., Abbrev. Univ., City of Univ., Abbrev. State, year.

Examples:

[19] J. O. Williams, "Narrow-band analyzer," Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, USA, 1993.
[20] N. Kawasaki, "Parametric study of thermal and chemical nonequilibrium nozzle flow," M.S. thesis, Dept. Electron. Eng., Osaka Univ., Osaka, Japan, 1993.

Basic format for the most common types of unpublished references:

J. K. Author, private communication, Abbrev. Month, year.
J. K. Author, "Title of paper," unpublished.
J. K. Author, "Title of paper," to be published.

Examples:

[21] A. Harrison, private communication, May 1995.
[22] B. Smith, "An approach to graphs of linear forms," 2014, *arXiv:2105.02824*.
[23] A. Brahms, "Representation error for real numbers in binary computer arithmetic," IEEE Computer Group Repository, Paper R-67-85.

Basic formats for standards:

a) Title of Standard, Standard number, date.
b) Title of Standard, Standard number, Corporate author, location, date.

Examples:

[24] IEEE Criteria for Class IE Electric Systems, IEEE Standard 308, 1969.
[25] Letter Symbols for Quantities, ANSI Standard Y10.5-1968.



First A. Author (Fellow, IEEE) and all authors may include biographies if the publication allows. Biographies are often not included in conference-related papers. Please check the Information for Authors to confirm. Author photos should be current, professional images of the head and shoulders. The first paragraph may contain a place and/or date of birth (list place, then date). Next, the author's educational background is listed. The degrees should be listed with the type of degree in what field, which institution, city, state, and country, and year the degree was earned. The author's major field of study should be lowercase.

The second paragraph uses the preferred third person pronoun (he, she, they, etc.) and not the author's last name. It lists military and work experience, including summer and fellowship jobs. Job titles are capitalized. The current job must have a location; previous positions may be listed without one. Information concerning previous publications may be included. The format for listing publishers of a book within the biography is: *Title of Book* (publisher name, year) similar to a reference. Current and previous research interests end the paragraph.

The third paragraph begins with the author's preferred title and last name (e.g., Dr. Smith, Prof. Jones, Mr. Kajor, Ms. Hunter, Mx. Riley). List any memberships in professional societies other than the IEEE. Finally, list any awards and work for IEEE committees and publications.

Second B. Author, photograph and biography not available at the time of publication.

Third C. Author, Jr. (Member, IEEE), photograph and biography not available at the time of publication.

Any paper with experiment data from human being or animals might raise the concerns of editorial board, who usually require consent form from the ethical committee of the authors organization.