IEEE Referencing Style Sheet

This referencing style sheet is to be used in conjunction with the Library's general Guide to Citing and Referencing.
IEEE style is used mainly in Electronic and Electrical Engineering and Computer Science. This style sheet gives general guidelines based on the IEEE's citation and referencing guide: http://www.ieee.org/documents/ieeecitationref.pdf

EndNote and EndNote Online currently include several variants of IEEE style such as IEEE-Pervasive Comp, IEEE Micro and IEEE ACM Trans Network. Check with your department to establish their preferred style.   Remember to check records imported using EndNote for errors or omissions, and that each reference is correctly formatted.

Citations

When writing a piece of academic work, you must acknowledge any sources which you have used. You do this by including a brief in-text 'citation' within the main body of your writing, next to the material you have used.

The IEEE style is a numeric style, where citations are numbered [1] in the order of appearance. This citation leads your reader to a full reference to the source in the list of references at the end of your work. Each citation number should be enclosed in square brackets on the same line as the text, before any punctuation, with a space before the bracket [2]. Once a source has been cited, the same number is re-used for all subsequent citations to the same source.

Here are some examples of IEEE style citation:

"... as shown by Brown [4], as previously stated."

"The theory was first put forward in 1987 [1]."

"For example, see [7]."

"Several recent studies [3, 4, 15, 16] have suggested that..."

The example above may also be formatted as:

 "Several recent studies [3], [4], [15], [16] have suggested that…"

Page numbers are required within citations where material is directly quoted or you refer to a specific part of the source, such as a detail difficult to find. Give page numbers within the square brackets, for example [1, p. 3].

References

At the end of your work, list full details of all of the sources which you have cited in your text in a section headed *References*, in numeric order. References listed must follow IEEE formatting guidelines (see reference examples overleaf). Your reference list should allow anyone reading your work to identify and find the material to which you have referred.

In IEEE style your reference list should be formatted in the following way:

- Align references left
- Single-space each entry, double-space between every new entry
- Place number of entry at left margin, enclose in square brackets
- Indent text of entries

Citations/references with multiple authors

If you choose to mention the author(s) of a source whilst citing it in the text of your work, if there are three or more you can abbreviate them using 'et al.' e.g. During their research, Fan, et al. [4] discuss lasers in detail. However, in general you do not need to mention the authors by name, just use the numeric citation in square brackets. In your full reference list at the end however, you always give the authors' names. In the reference list you can only abbreviate these using 'et al.' if there are six or more authors.

Reference examples

There are standard reference formats for most types of document. Below are examples of the most common types of document you might want to reference. Each of the following gives a suggested standard format for the reference followed by examples for the different document types.

Book
[Ref number]   Author's initials. Author's Surname, *Book Title*, edition (if not first). Place of publication: Publisher, Year.

[1]   I.A. Glover and P.M. Grant, *Digital Communications*, 3rd ed. Harlow: Prentice Hall, 2009.

Book chapter

[Ref number]   Author's initials. Author's Surname, "Title of chapter in book," in *Book Title,* edition (if not first), Editor's initials. Editor's Surname, Ed. Place of publication: Publisher, Year, page numbers.

[2]   C. W. Li and G. J. Wang, "MEMS manufacturing techniques for tissue scaffolding devices," in *Mems for Biomedical Applications*, S. Bhansali and A. Vasudev, Eds. Cambridge: Woodhead, 2012, pp. 192-217.

Electronic Book

[Ref number] Author's initials. Author's Surname. (Year, Month Day). *Book Title* (edition) [Type of medium]. Available: URL

[3]   W. Zeng, H. Yu, C. Lin. (2013, Dec 19). *Multimedia Security Technologies for Digital Rights Management* [Online]. Available: http://goo.gl/xQ6doi

Note: If the e-book is a direct equivalent of a print book e.g. in PDF format, you can reference it as a normal print book.

Journal article

[Ref number]   Author's initials. Author's Surname, "Title of article," *Title of journal abbreviated in Italics,* vol. number, issue number*,* page numbers, Abbreviated Month Year.

[4]   F. Yan, Y. Gu, Y. Wang, C. M. Wang, X. Y. Hu, H. X. Peng, et al., "Study on the interaction mechanism between laser and rock during perforation," *Optics and Laser Technology,* vol. 54, pp. 303-308, Dec 2013.

Note: the above example article is from a journal which does not use issue numbers, so they are not included in the reference.

E-Journal article

PDF versions of journal articles are direct copies of the print edition, so you can cite them as print journals.

[Ref number]   Author's initials. Author's Surname. (Year, Month). "Title of article." *Journal Title* [type of medium]. volume number, issue number, page numbers if given. Available: URL

[5]   M. Semilof. (1996, July). "Driving commerce to the web-corporate intranets and the internet: lines blur". *Communication Week* [Online]. vol. 6, issue 19. Available: http://www.techweb.com/se/directlinkcgi?CWK19960715S0005

When you are compiling your reference list you may abbreviate journal titles:

For a list of IEEE abbreviations go to:
http://www.ieee.org/documents/tjmnames.pdf

For non IEEE journal abbreviations go to:
http://www.bath.ac.uk/library/help/infoguides/abbreviations.html

For further information on the common abbreviations of words used in references for the IEEE style go to:
http://www.ieee.org/documents/style_manual.pdf

Conference papers

[Ref number]   Author's initials. Author's Surname, "Title of paper," in *Name of Conference,* Location, Year, pp. xxx.

[6]   S. Adachi, T. Horio, T. Suzuki. "Intense vacuum-ultraviolet single-order harmonic pulse by a deep-ultraviolet driving laser," in *Conf. Lasers and Electro-Optics*, San Jose, CA, 2012, pp.2118-2120.

Standard abbreviations may be applied to the title of the conference. For a table of abbreviations go to:
http://www.ieee.org/documents/ieeecitationref.pdf

Reports

The general form for citing technical reports is to place the name and location of the company or institution after the author and title and to give the report number and date at the end of the reference. If the report has a volume number add it after the year.

[Ref number] Author's initials. Author's Surname, "Title of report," Abbreviated Name of Company., City of Company., State, Report number, year.

[7]   P. Diament and W. L. Luptakin, "V-line surface-wave radiation and scanning," Dept. Elect. Eng., Colombia Univ., New York, Sci Rep. 85, 1991.

Patents

[Ref number]   Author's initials. Authors Surname, "Title of patent," Country where patent is registered. Patent number, Abbrev of Month Day Year.

[8]   J. P. Wilkinson, "Nonlinear resonant circuit devices," U.S. Patent 3 624 125, July 16 1990.

Note: Use "issued date" if several dates are given.

Standards

[Reference number] *Title of Standard*, Standard number, date.

[9]   *Shunt power capacitors*, IEEE standard 18-2012, 2013.

Theses/Dissertations

[Ref number]   Author's initials. Author's Surname, "Title of thesis," Designation type, Abbrev. Dept., Abbrev. Univ., City of Univ., State, Year.

[10]   J. O. Williams, "Narrow-band analyser," Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, 1993.

Online Documents

If you are using documents such as a reports, conference papers, standards, patents or thesis online and it also exists as an identical print equivalent i.e. with the same format and pagination, it can be usually be referenced as the print version.

If it is e-only, you can make the standard reference template an electronic version by adding the material type in square brackets e.g. [Online]. after the document title. If there is no specific document title you can place this after the document number (e.g. patent number).

At the end of the reference add: Available: URL. See below for an example of an online patent:

[11]   M.R. Brooks, "Musical toothbrush with adjustable neck and mirror," U.S Patent *326189* [Online], May 19 1992. Available: http://goo.gl/VU1WEk

Websites

Note: Include as much of the key information as you can find for a given website. If a web page has no personal author, you can use a corporate author. Failing that, you can use either Anon. (for anonymous) or it is permissible to use the title of the site.

[Ref number]   Author's initials. Authors Surname. (Year, Month. Day). *Title of web page* [Online]. Available: URL

[12]   BBC News. (2013, Nov. 11). *Microwave signals turned into electrical power* [Online]. Available: http://www.bbc.co.uk/news/technology-24897584

[13]   M. Holland. (2002). *Guide to citing internet sources* [Online]. Available: http://www.bournemouth.ac.uk/library/using/guide_to_citing_internet_sourc.html