Citations and References

Alice Devillers

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Citation and references

- Citation is used as the name for the mention you make in your text of a source.
- Reference is used as the name for the bibliographic item that appears in the list at the end of your text.

The one thing that distinguishes scholarly writing from any other type is its acknowledgment of sources.

- Rules for citations
- 2 How to make a bibliography in latex
 - Doing it by hand
 - Bibtex
- Rules for references

Section 1

Rules for citations

Citations: why?

Citations are very important and say a lot about your work! They

- strengthen your arguments,
- simplify your exposition,
- show that you are familiar with relevant literature.
- are also a form of good manners amongst scholars (it is a sign of respect to one's peers).

Citation with bracketed number

Do not state the full reference within the text. Use a bracketed number, and use that number as a pointer to a numbered item on the reference list.

Example

Knuth [5] developed TEXin the 1970's and Lamport [6] extended it to LATEXabout a decade later.

Citation: where?

Example

The algorithm [7] was shown to terminate after $n \log n$ steps.

This says the algorithm was described in [7].

Example

The algorithm was shown to terminate [7] after $n \log n$ steps.

This says that [7] contains a proof that the algorithm terminates.

Citation: pointer is not a word

Ensure that your sentence is easily readable: do not use a pointer as a word.

Bad example

In [5], it is shown that tabu search is a viable alternative to simulated annealing in this application, although [11] and [15] also give many examples where genetic algorithms work equally well.

This is acceptable in some fields, so check the literature to see if your peers are doing that or not.

Citation: be specific

Bad example

It has been argued [6] that within the next twenty years all our entertainment will be supplied by a virtual reality industry.

This is too vague. Also passive voice is bad.

Example

Simpson (1986) [6] argued that ...

Citation: author's name

One way to be specific is to insert the name of the author and possibly the date.

When citing an important reference, mentioning the author's name:

- saves the reader from having to look at your list of references over and over again,
- assists you in writing in the active voice.

Citation: author's name

One way to be specific is to insert the name of the author and possibly the date.

When citing an important reference, mentioning the author's name:

- saves the reader from having to look at your list of references over and over again,
- assists you in writing in the active voice.

Personal titles (Dr, Prof) should not be quoted in scholarly writing, just use the last name.

Citation: multiple authors

Name up to three authors in your citation. If a paper has four or more, you should cite it with the first author's name, followed by the expression et al.

Example

Stein et al. [5] have implemented this algorithm on the Datacube.

Always give the full reference in the reference list.

In the bibliography:

[5] Stein, Jacobs, Sherman, Polst and Chandra. Title. Bibliographic reference.

Citation: just a pointer

Sometimes you want to merely use your citation as a simple pointer (without naming the authors):

- simple courtesy to the original discoverer of the result you are using,
- too many sources to mention each one gracefully,
- you are giving so complete a summary that your reader need never look at the source.

Citation: group together

Group bracketed numbers whenever you can do so without causing confusion.

Example

Both TeXand LaTeX[5,6] are widely used in academic communities.

Citation: no over-citing

Do not over-cite (still far better than no citation at all).

Example

Knuth [1,5,6,8] and many others [3,9,11,15,23] purport to show that the algorithm [4,7,10,12] has complexity [2] that must be bounded above [5] by the complexity of the simulated quicksort [15,16,18,19,21,25].

Citation: over-citing

Assume that your reader has a reasonable attention span.

Bad example

Knuth [5] developed TEXin the 1970's and Lamport [6] extended it to Lambout a decade later. TEX[5] is a powerful typesetting program, but Lamburger TEX[6] has a number of macros that make it easier to use for typesetting mathematics. Both TEX[5] and Lamburger TEX[6] are widely used in academic communities.

Citation: extra information

You can place more details, e.g. a page or theorem number, in brackets directly after the number.

Example

Smith [5, Theorem 1.3] proved that A implies B and also [5, p.26] that B implies C.

Some journals do not like page numbers mixed in with citations.

Citation: extra information

Other way to do it: putting the page number in the reference list.

Example

Instead of

Smith [5, p.18] proved that A implies B and also [5, p.26] that B implies C.

You can write

Smith [5] proved that A implies B and also [6] that B implies C.

and use two references:

[5] John Smith. Title. Bibliographic reference, p.18.

[6] —, p.26.

Citation: miscellanea

• Arrange numbers in order when grouped inside a single bracket, e.g. [3, 14, 16], even if not order of year of publication.

Citation: miscellanea

- Arrange numbers in order when grouped inside a single bracket, e.g. [3, 14, 16], even if not order of year of publication.
- It is not usual to quote word for word from other papers in scientific writing, except possibly in the history of science. If you do so, mark your source clearly. Otherwise it would be plagiarism.

Citation: book/non-book

Book a book or a journal: a fat thing bound by itself; or the equivalent in some other medium of a fat thing bound by itself, eg. a book, a journal, a magazine, a newspaper, a conference proceedings, a PhD thesis, etc.

Non-book an article or a story or a poem or a pamphlet: a thin thing or a thing that is part of something else, eg. an article in a journal or magazine, a Master's thesis or any other homework assignment, a short story, a chapter of a book.

Citation: titles

When citing a title, use uppers-and-lowers capitalisation (UaLC).

For a book title, use italics; for a non-book title, use quotation marks.

Example

Pentland's paper "Linear Shape from Shading" appears in Volume 4 of the *International Journal of Computer Vision*.

UaLC= capitalize first word, first word after a colon, and all other words except unimportant words like articles, conjunctions ...

Section 2

How to make a bibliography in latex

Citations and References in LaTeX

LATEX helps you to refer to papers.

keys

Each reference needs a **key**: a string of letters and numbers identifying it, e.g. Smi68.

```
\cite{Smi68}.
```

LATEX converts this to the appropriate format, e.g. [7].

If you write $\text{cite}\{\text{key1},\text{key2}\}\$ the citation will appear as [3,6].

More precise citation

Sometimes you want to refer to a specific page or a specific theorem.

Example

```
Use the command \text{cite[p.5]}\{\text{key}\}\ or \text{cite[Theorem 3]}\{\text{key}\}.
```

This will appear as [1,p.5] or [1,Theorem 3].

Subsection 1

Doing it by hand

Manually

```
Where you want your references, type \begin{thebibliography}{} \bibitem{key} \ldots \cdot \end{thebibliography}
```

The bibliography will contain all the bibitems, even those you did not cite in the text, in the order you gave them (it does not order them alphabetically for you).

Ensure all references you list are also cited in your work.

Example

```
\begin{thebibliography}{}
\bibitem{Cam99} P. J. Cameron. Permutation
groups. London Mathematical Society Student
Texts, 45. Cambridge University Press, Cambridge,
1999
\bibitem{rk3} A. Devillers, M. Giudici, C. H. Li, G.
Pearce, and C. E. Praeger. On imprimitive rank 3
permutation groups. J. London Math. Soc. (2) 84
(2011), 649-669.
\end{thebibliography}
```

Example

- P. J. Cameron. *Permutation Groups*. London Mathematical Society Student Texts, 45.
 Cambridge University Press, Cambridge, 1999.
- [2] A. Devillers, M. Giudici, C. H. Li, G. Pearce, and C. E. Praeger. On imprimitive rank 3 permutation groups. J. London Math. Soc. (2) 84 (2011), 649-669.

Citation with different pointers

```
If you write 
\bibitem[pointer]{key}
the citation will appear as [pointer] instead of [1].
```

Example

\bibitem[C99]{Cam99} P. J. Cameron.

Permutation Groups. London Mathematical Society
Student Texts, 45. Cambridge University Press,
Cambridge, 1999.

will appear as [C99] everywhere.

In papers, the appearance of citations is determined by the journal it is published in.

Compiling

You will need to compile the file twice, so that it gets all the cross-referencing right.

Subsection 2

Bibtex

Bibtex

Bibtex is an auxiliary program to Latex that automatically constructs a reference section for a Latex document by searching one or more bibliographic databases.

It is **highly** recommended for long documents, such as your dissertation.

Bib file

Store your (potential) references in a bib file, in this case: mybib.bib.

The references listed in the bib file need not be limited to the ones you are citing in the document you are preparing; Bibtex picks out the ones you actually cite and only includes those in your bibliography.

Standard entry types

There are numerous standard entry types, with varying required and optional fields. For example: book, article, inproceedings (or conference), manual, phdthesis, etc. The key is the database identifier for that publication, for instance I chose CaO98 as the key in the next entry.

Standard entry types: article

```
@article {Ca098,
    AUTHOR = {Cardell-Oliver, Rachel},
     TITLE = {An equivalence theorem for the
              operational and temporal semantics \
              of real-time, concurrent programs},
   JOURNAL = {J. Logic Comput.},
  FJOURNAL = {Journal of Logic and Computation},
    VOLUME = \{8\},
      YEAR = \{1998\},\
    NUMBER = \{4\},
     PAGES = \{545 - 567\},
      ISSN = \{0955-792X\},
       DOI = \{10.1093/logcom/8.4.545\},
       URL = \{http://dx.doi.org/10.1093/logcom/8.4.545\}
```

Standard entry types: article

For @article

Required fields are: author, title, journal, year.

Optional fields: volume, number, pages, month,

note, key.

Additional field names can be included, and will be ignored by Bibtex.

Standard entry types: book

```
@book {GodsilRoyle,
    AUTHOR = {Godsil, Chris and Royle, Gordon},
     TITLE = {Algebraic graph theory},
    SERIES = {Graduate Texts in Mathematics},
    VOLUME = \{207\}.
 PUBLISHER = {Springer-Verlag},
   ADDRESS = {New York},
      YEAR = \{2001\}.
     PAGES = \{xx+439\},
      ISBN = \{0-387-95241-1; 0-387-95220-9\},
        DOI = \{10.1007/978-1-4613-0163-9\},
       URL = \{http://dx.doi.org/10.1007/978-1-4613-0163\}
```

Standard entry types: book

For @book Required fields: author/editor, title, publisher, year Optional fields: volume/number, series, address, edition, month, note, key.

Export bibtex format entries

There are website where you can directly export the bibtex format entries.

On ScienceDirect and most journal websites, you can export references and choose the bibtex format.

For maths papers, go to the review of the article/book you need in MathSciNet http://www.ams.org/mathscinet/index.html, select alternative format BibTex, copy and paste, choose a key, and you are done!

Export bibtex format entries

For CS papers:

- ACM digital library http://dl.acm.org/
- IEEE explore http://ieeexplore.ieee.org/
- DLDP bibliography http://www.informatik.uni-trier.de/

Making citations

The bibliography will only contain those files you cited, using the command \cite{CaO98}. For instance, [2], [1]. Occasionally you might want to include references in your bibliography that are not cited in the text. These can be added with the command \nocite{key} given anywhere in the text.

Bibliography style

The style of the bibliography can be selected with a style declaration of the form \bibliographystyle{style} anywhere after the preamble (usually just before the start of the bibliography).

Bibliography style

Possible styles are:

- plain Entries are ordered alphabetically (last name of first author); pointer is a number in square brackets.
- unsrt Same as plain, except entries are ordered according to chronological citation.
- alpha Same as plain, but the pointer is an abbreviation of the author's name plus year of publication.
- abbrv Same as plain, but the reference list is shortened by abbreviating first names, months, and journal names.

Bibliography

The LaTeXfile must contain the command \bibliography{mybib, ... } at the point in the text where the bibliography is to appear, usually at the end. You can have more than one bib file, and bibtex will parse through them all.

Example

[1] Rachel Cardell-Oliver.

An equivalence theorem for the operational and temporal semantics of real-time, concurrent programs.

J. Logic Comput., 8(4):545-567, 1998.

[2] Chris Godsil and Gordon Royle.

Algebraic graph theory, volume 207 of Graduate
Texts in Mathematics.

Springer-Verlag, New York, 2001.

Compiling

To compile the file: latex the file, bibtex the file, then latex the file twice. That is, in terminal pdflatex myarticle bibtex myarticle pdflatex myarticle pdflatex myarticle Or in your LATEX editor click on the corresponding buttons.

More info

For further information visit the website http://www.bibtex.org/

Managing articles

There are softwares that allow you to keep track of/organise the papers you have downloaded, do specific searches by author, journal, etc., add your own notes to the pdf files, export to bibtex.

Free: Mendeley, Zotero, BibDesk (Mac).
Pay: Papers, EndNote (does not work very well with BibTex).

Section 3

Rules for references

References

Easy references fall into a simple block format of which the three main blocks are:

- Author.
- 2 Title.
- Bibliographic information.

Each block starts with a capital letter and ends with a period.

Always check your references carefully.

Nearly everything from this slide on is automatic when using BibTex.

References: books, papers

The most common references are to books and journal papers.

Example

- [1] Berthold Klaus Paul Horn. *Robot Vision*. MIT Press, 1986.
- [2] L. S. Davis. A survey of edge detection techniques. *Computer Graphics and Image Processing*, Vol. 11, No. 4, pp 248-270, September 1975.

References: journals

Journals

Standard Abbreviations for journals can be found in Mathematical Reviews (MathSciNet) or on the website of the journal.

References: authors

In the author block you should list the full author name given on the work. Authors should choose the name by which they wish to be known professionally, and then stick to it.

References: authors

In the author block you should list the full author name given on the work. Authors should choose the name by which they wish to be known professionally, and then stick to it.

List the authors' names in normal order (first name, last name), and in the same order as on the work. Initials should be spaced out: A. A. Cole (in \LaTeX X: A. \sim A. \sim Cole).

References: corporate authors

Corporate authors are dealt with as follows:

[13] IBM. Elementary math library. *Programming RPQ P81005, Program number 5799-BTB, Program reference and Operations Manual,* SH20-2230-1, August 1984.

References: editors

There are two kinds of editors: the kind who compiles the work of several authors and the kind who prepares the work of a single author.

The compiler-editor gets listed in block 1 if you are referring to the whole compilation, and in block 3 if you are referring to part of it:

Example

[15] Michael Brady, editor. *Robotics Science*. MIT Press 1989.

[18] Marc H. Raibert. Legged robots. In Michael Brady, editor, *Robotics Science*, MIT Press, 1989.

References: editors

The preparer-editor usually gets mentioned in block 3.

Example

[11] Alan Turing. *The Collected Works*. Edited by Anthony Hodges, Oxford University Press, 1988.

References: titles

Book title Use italics, with uppers-and-lowers capitalisation.

Non-book title Do not use quotation marks nor uppers-and-lowers. Use sentence capitalization (capitalize the first word, the first word after a colon, and no other words except proper nouns and proper adjectives).

References

If you are referring to something written in a foreign language, it is a courtesy to give a translation for your monolingual readers.

Example

[1] J. Tits. Sur les produits tensoriels de deux algèbres de quaternions. (French) [On the tensor products of two quaternion algebras] *Bull. Soc. Math. Belg. Sér. B* 45 (1993), no. 3, 329–331.

References

If you are referring to something written in a foreign language, it is a courtesy to give a translation for your monolingual readers.

Example

[1] J. Tits. Sur les produits tensoriels de deux algèbres de quaternions. (French) [On the tensor products of two quaternion algebras] *Bull. Soc. Math. Belg. Sér. B* 45 (1993), no. 3, 329–331.

Always give the full title and subtitle.

References: Bibliographic information

- This block simply tells the reader how to find the source.
- Give a complete address for an obscure publisher, but no address for a well-known publisher.
- Always give the date of the publication. The date of publication for a book is the date of its last edition.

References: Optional blocks

There are two other optional blocks that are sometimes useful when compiling your reference list:

- 4. More bibliographic information.
- 5. Annotation.

References: Optional blocks

An example of when block 4 might be used is when the publication has appeared more than once.

Example

[5] M. Segal. The use of B-splines in CAD. *Computer Graphics and Manufacturing*, IV, pp 43-57, 1989. Also published as Stanford Technical Report in Artificial Intelligence, TRAI-88/76, 1988.

References: Optional blocks

The occasions for using the annotation block are rare, but occasionally you might want to warn the author about a flawed source.

Example

[11] C. Wiles. Proof of Fermat's last theorem. *Journal of Elliptic Function Theory*, Vol. 2, pp 12-145, 1992. This proof was later shown to be incomplete.

References: not yet published

Papers not yet in print can be referred to as follows:

- **(to appear)** accepted by a journal and published shortly. List the journal in which the paper will appear.
- (submitted) submitted but not yet accepted. It might be rejected, so do not mention the journal.
- (in preparation) the paper is being written but not yet ready for submission

References: emails

Private email is a personal communication. Avoid if at all possible.

Example

[10] Jack Stolti. Private communication, 27 September 2003.

References: forums, blog

Forum messages and blogs need to have author, title, and a way to find the source.

Example

[2] Martin Minow. Re: Electronic house arrest units. RISKS- FORUM Digest (risks@csl.sri.com), 10(26), 29 August 1990. Retrieved 20-03-2013.

[3] Terrence Tao. A Fourier-free proof of the Furstenberg-Sarkozy theorem.

http://terrytao.wordpress.com/, 28 February 2013. Retrieved 20-03-2013.

And you need to keep a copy (retrieve) in case it disappears from internet

References: software

For a piece of software, either the source or the runnable code, give the name of the program, the version number, the platform on which you have run it, and where to get it.

Example

[14] Tru-Champ 3.4 for the Macintosh. Electronic Equipment Corporation, 1483 Meller Road, Cambridge, Massachusetts 02138.

[15] Richard Stallman. GNU emacs 13 for Unix. Free Software Foundation, 675 Massachusetts Avenue, Cambridge, Massachusetts 02139.

References: software

You can also give an URL of where to download it, or a scientific paper where it was first described.

Example

[16] W. Bosma, J. Cannon and C. Playoust, The Magma algebra system I: The user language, J. Symb. Comp. 24 3/4 (1997) 235-265. Also see the ${\rm MAGMA}$ home page at http://www.maths.usyd.edu.au:8000/u/magma/.

References

More examples of references in Robyn Owens' notes, including how to refer to film and music. See Unit website.

Conclusion

Now

- is the time to record the bibliographical reference of the papers you are reading.
- is the time to think about which name you want to use, e.g. F.E. Smith, or Fred E. Smith, or Fred Smith.
- work on your lit review, for CS students (due April 16).