Published in IET Control Theory and Applications

doi: 10.1049/iet-cta.2012.0237



ISSN 1751-8644

# How to use the IET BibteX Style

### 1 INTRODUCTION

The iet.bst BIBTEX style file described in this document can be used with BIBTEX to produce LATEX bibliographies of high quality that are suitable for use in iet journal.

### 2 Basic structure

In the words of the program's author: Here's how BibTEX works. It takes as input

- an .aux file produced by LaTEX on an earlier run;
- a .bst file (the style file), which specifies the general reference-list style and specifies how to format individual entries, and which is written by a style designer [..] in a special-purpose language [..], and
- .bib file(s) constituting a database of all reference-list entries the user might ever hope to use.

BibTEX chooses from the .bib file(s) only those entries specified by the .aux file (that is, those given by LaTEX's \cite or \nocite commands), and creates as output a .bbl file containing these entries together with the formatting commands specified by the .bst file [..]. LaTEX will use the .bbl file, perhaps edited by the user, to produce the reference list.

It is assumed that the reader has a basic understanding of the operation and use of BIBTEX. Documentation for the use of BIBTEX includes the user's guide as well as supplementary are available at http://www.ctan.org/pkg/bibtex.

## 3 Bibliographic information file

BibTeX uses a style-independent text-based file format for lists of bibliography items, such as articles, books, and thesis. BibTeX bibliography file names usually end in .bib.

IET Control Theory Appl., pp. 1-8

doi: 10.1049/iet-cta.2012.0237

Bibliography entries each contain some subset of standard data entries:

- address: Publisher's address (usually just the city, but can be the full address for lesser-known publishers)
- author: The name(s) of the author(s) (in the case of more than one author, separated by and)
- booktitle: The title of the book, if only part of it is being cited
- chapter: The chapter number
- edition: The edition of a book, long form (such as "first" or "second")
- editor: The name(s) of the editor(s)
- howpublished: How it was published, if the publishing method is nonstandard
- institution: The institution that was involved in the publishing, but not necessarily the publisher
- journal: The journal or magazine the work was published in
- key: A hidden field used for specifying or overriding the alphabetical order of entries (when the "author" and "editor" fields are missing). Note that this is very different from the key (mentioned just after this list) that is used to cite or cross-reference the entry.
- month: The month of publication (or, if unpublished, the month of creation)
- note: Miscellaneous extra information
- number: The "(issue) number" of a journal, magazine, or tech-report, if applicable. (Most publications have a "volume", but no "number" field.)
- organization: The conference sponsor
- pages: Page numbers, separated either by commas or double-hyphens.
- publisher: The publisher's name
- school: The school where the thesis was written
- series: The series of books the book was published in (e.g. "The Hardy Boys" or "Lecture Notes in Computer Science")
- title: The title of the work
- type: The field overriding the default type of publication (e.g. "Research Note" for techreport, "PhD dissertation" for phdthesis, "Section" for inbook/incollection)
- volume: The volume of a journal or multi-volume book
- year: The year of publication (or, if unpublished, the year of creation)

#### 4 **Entry types**

Bibliography entries included in a .bib file are split by types. The following types are understood by virtually all BibTeX styles:

article

An article from a journal or magazine.

Required fields: author, title, journal, year

Optional fields: volume, number, pages, month, note, key

book

A book with an explicit publisher.

Required fields: author/editor, title, publisher, year

Optional fields: volume/number, series, address, edition, month, note, key

booklet

A work that is printed and bound, but without a named publisher or sponsoring institution.

Required fields: title

Optional fields: author, howpublished, address, month, year, note, key

conference

The same as inproceedings, included for Scribe compatibility.

inbook

A part of a book, usually untitled. May be a chapter (or section or whatever) and/or a range of pages.

Required fields: author/editor, title, chapter/pages, publisher, year

Optional fields: volume/number, series, type, address, edition, month, note, key

incollection

A part of a book having its own title.

Required fields: author, title, booktitle, publisher, year

Optional fields: editor, volume/number, series, type, chapter, pages, address, edition, month, note, key

inproceedings

An article in a conference proceedings.

Required fields: author, title, booktitle, year

Optional fields: editor, volume/number, series, pages, address, month, organization, publisher, note, key

manual

Technical documentation.

Required fields: title

Optional fields: author, organization, address, edition, month, year, note, key

masters the sis

A Master's thesis.

Required fields: author, title, school, year

Optional fields: type, address, month, note, key

misc

For use when nothing else fits.

Required fields: none

Optional fields: author, title, howpublished, month, year, note, key

phdthesis

A Ph.D. thesis.

Required fields: author, title, school, year

Optional fields: type, address, month, note, key

proceedings

The proceedings of a conference.

Required fields: title, year

Optional fields: editor, volume/number, series, address, month, publisher, organization, note, key

techreport

A report published by a school or other institution, usually numbered within a series.

Required fields: author, title, institution, year

Optional fields: type, number, address, month, note, key

unpublished

A document having an author and title, but not formally published.

Required fields: author, title, note

Optional fields: month, year, key

In addition, each entry contains a key that is used to cite or cross-reference the entry. This key is the first item in a BibTeX entry, and is not part of any field.

#### 5 Style files

BibTeX formats bibliographic items according to a style file, typically by generating TeX or LaTeX formatting commands. However, style files for generating HTML output also exist. BibTeX style files, for which the suffix .bst is common, are written in a simple, stack-based programming language (dubbed "BibTeX Anonymous Forth-Like Language", or "BAFLL", by Drew McDermott) that describes how bibliography items should be formatted.

Most journals or publishers that support LaTeX have a customized bibliographic style file for the convenience of the authors. This ensures that the bibliographic style meets the guidelines of the publisher with minimal effort.

#### 6 Bib file

A .bib file might contain the various entries like ARTICLE, BOOK etc. For example:

```
@book{Anderberg83,
```

```
author =
           {Curtis, E. B. and Morrow, J. A.},
title =
           {Inverse problems for electrical networks},
```

IET Control Theory Appl., pp. 5-8

doi: 10.1049/iet-cta.2012.0237

```
publisher = {World Scientific, USA},
 year = \{2000\},\
}
@Article{Banfield93,
 author = {Banfield, J. D. and Raftery, A. E.},
  title = {Model-Based Gaussian and Non-Gaussian Clustering },
             {Biometrics },
 journal =
 year = \{1993\},
 volume = \{49\},
 number = \{3\},
 pages = {}
}
 @Article{Arabie80,
  author = {Arabie, P. and Carroll, J. D},
  title = {A mathematical programming approach to fitting the
            ADCLUS models},
  journal = {Psychometrika},
 year =
            {1980},
 volume = {},
           {},
 pages =
 note= {arXiv:0905.4913v2},
}
@Article{Beale69,
 author = {Beale, E. M. L.},
  title = {Euclidean cluster analysis },
  journal = {Bulletin of the International Statistical Institute },
 year = \{1969\},\
```

```
volume = \{43\},
  pages = \{92-94\},
 }
@Article{Bezdek74,
              {Bezdek, J. C.},
   author =
   title =
             {Numerical taxonomy with fuzzy sets},
   journal =
                 {Journal of Methematical Biology},
  year = \{1974\},
  volume =
              {1},
  pages = \{57 - -71\},
 }
@article{Hear:Holm:Step:quan:2006,
Author = {Heard, Nicholas A. and Holmes, Christopher C. and
           Stephens, David A. },
Journal = {J. Am. Statist. Assoc.},
Pages = \{18--29\},
Title = {A Quantitative Study of Gene Regulation Involved in the
         Immune Response of {A}nopheline Mosquitoes: {A}n Application
         of {B}ayesian Hierarchical Clustering of Curves},
Volume = \{101\},
Year = \{2006\}\}
@article{Fan:2004,
Author = {Fan, J. and Peng, H.},
Journal = {Ann. Statist.},
Pages = \{928 - -61\},
Title = {Nonconcave penalized likelihood with a diverging number of
        parameters},
Volume = \{32\},
Year = \{2004\}\}
```

The way LaTeX deals with this is by specifying \cite commands and the desired bibliography style in the LaTeX document. If the command \cite{Banfield93} appears inside a LaTeX document, the bibtex program will include this book in the list of references for the document and generate appropriate LaTeX formatting code.

There are some formatting to the author names:

- Each author should be separated by "and".
- Insert comma after author name and give space between initials.
- For example: author = {Banfield, J. D. and Raftery, A. E.}

### 7 How to run BibTex

In order to get the references call all the citations [1–7] whatever is needed for your article and give the following coding:

```
\bibliographystyle{iet}
\bibliography{sample}
```

Compile your article twice to generate a proper auxillary file, then run "BibTeX" and again compile the article twice. Finally you will get the .bbl file. Copy the text from the .bbl file and replace it in the bibliography section.

### 8 References

- 1 Curtis, E.B., Morrow, J.A.: 'Inverse problems for electrical networks'. (World Scientific, USA, 2000)
- 2 Banfield, J.D., Raftery, A.E.: 'Model-based gaussian and non-gaussian clustering', Biometrics, 1993, 49, (3)
- 3 Arabie, P., Carroll, J.D.: 'A mathematical programming approach to fitting the adelus models', *Psychometrika*, 1980, arXiv:0905.4913v2
- 4 Beale, E.M.L.: 'Euclidean cluster analysis', Bulletin of the International Statistical Institute, 1969, 43, pp. 92–94
- 5 Bezdek, J.C.: 'Numerical taxonomy with fuzzy sets', Journal of Methematical Biology, 1974, 1, pp. 57–71
- 6 Heard, N.A., Holmes, C.C., Stephens, D.A.: 'A quantitative study of gene regulation involved in the immune response of Anopheline mosquitoes: An application of Bayesian hierarchical clustering of curves', *J Am Statist Assoc*, 2006, **101**, pp. 18–29
- 7 Fan, J., Peng, H.: 'Nonconcave penalized likelihood with a diverging number of parameters', *Ann Statist*, 2004, **32**, pp. 928–61