Implications of Biomedical Identification in Healthcare

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*Abstract*—This article describes how to use the IEEEtran.bst BIBTEX style file to produce bibliographies that conform to the standards of the publications of the Institute of Electrical and Electronics Engineers (IEEE).

*Index Terms*—bibliography, BIBTEX, IEEE, LATEX, paper, references, style, template, typesetting.

# I. INTRODUCTION

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HE IEEEtran.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 IEEE publications. Other potential applications include thesis and academic work, especially when such work is in the area of electrical and/or computer engineering.

This document applies to version 1.12 and later of the IEEEtran BIBTEX style. Prior versions do not have all of the features described here. IEEEtran.bst will display the version number on the user’s console during execution. The most recent version of this package can be obtained on CTAN [1] and may also be mirrored at various places within IEEE’s website [2]. Additional support may be found at the IEEEtran homepage [3].

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 [4] as well as supplementary information such as a comprehensive tutorial [5], FAQs [6], [7], and a guide using practical examples [8]. The large collection of sample bibliographies and string definitions at the TEX User Group Bibliography Archive may also be of help [9]. General support for BIBTEX related questions can be obtained in the usenet newsgroup comp.text.tex.

Note that the references section of this document is used for two purposes: (1) to provide information where additional information can be found; and (2) to provide examples of references created using the IEEEtran BIBTEX style. The first few citations above fall into the first category, while the vast majority of the citations that follow will serve as examples and are not meant to be actually referred to. Hopefully, it will be clear from context which way a particular reference is used.

# II. Source Summaries

The IEEEtran BIBTEX package consists of the following files. Note that the IEEEtran packages from IEEE’s website

## A. Resource Requirements

## B. Resource Requirements

## C. Resource Requirements

## D. Resource Requirements

## E. Resource Requirements

## F. Resource Requirements

## G. Resource Requirements

## H. Resource Requirements

**IEEEtran.bst**: The standard IEEEtran BIBTEX style file (unsorted, i.e., references will appear in the order in which they are cited). Recommended for work that is to be submitted to the IEEE.

**IEEEtranS.bst**: The IEEEtran BIBTEX style file, but with additional sorting code, similar to that of plain.bst, which sorts the entries based on the names of the authors, editors, organizations, etc. Some IEEE conferences/publications may allow/use sorted bibliographies, but the vast majority are unsorted.

**IEEEtranSA.bst**: Like IEEEtranS.bst, but with alphanumeric citation tags like alpha.bst. Not for normal IEEE use.

**IEEEtranN.bst**: Like IEEEtran.bst, but based on plainnat.bst and is compatible with Patrick W. Daly’s natbib package [10]. Not for normal IEEE use.

**IEEEtranSN.bst**: Sorting version of IEEEtranN.bst. Not for normal IEEE use.

**IEEEexample.bib**: A BIBTEX database that contains the references shown in the references section of this document. Users can copy the entries therein to serve as starting templates. The entries also have comments which may be of additional help.

**IEEEfull.bib**: A file that contains a comprehensive set of BIBTEX string definitions for the full names of IEEE journals and magazines. Because IEEE’s bibliography style uses abbreviated journal names, this file’s intended use is for specialized or non-IEEE related work.

**IEEEabrv.bib**: Same as above, but contains the abbreviated form of the journal and magazine names. Recommended for work that is to be submitted to the IEEE.

BIBTEX .bst files can be accessed system-wide when they are placed in the

<texmf>/bibtex/bst

directory, where <texmf> is the root directory of the user’s TEX installation. Similarly, system-wide .bib files (IEEEfull.bib and IEEEabrv.bib) can be placed in

<texmf>/bibtex/bib

On systems that have a local texmf tree (<texmflocal>), which may be named “texmf-local” or “localtexmf”, it may be advisable to install packages in <texmflocal>, rather than <texmf> as the contents of the former, unlike that of the latter, are preserved after the LATEX system is reinstalled and/or upgraded.

Alternatively, on teTEX (Unix) systems, users can set the BSTINPUTS and BIBINPUTS environment variables to specify the search paths for .bst and .bib files, respectively. Similarly, MiKTEX users can alter the “Input Dirs” path in the BibTEX section of the miktex.ini configuration file. On some LATEX systems, the directory look-up tables will need to be refreshed after making additions or deletions to the system files. For teTEX and fpTEX systems this is accomplished via executing texhash as root. MiKTEX users can run initexmf -u to accomplish the same thing.

Users not willing or able to install the files system-wide can install them in their personal directories, but will then have to provide the path (full or relative) in addition to the filename when referring to them in LATEX.

III. Current Research

IEEEtran.bst is invoked using the normal LATEX bibliography commands:

\bibliographystyle{IEEEtran}

\bibliography{IEEEabrv,mybibfile}

String definition files must be loaded before any database files containing entries that utilize them — so the file names within the \bibliography command must be listed in a proper order.

In standard BIBTEX fashion, new documents will require a LATEX run followed by a BIBTEX run and then two more LATEX runs in order to resolve all of the references. An additional series of runs will be required as citations are added to the document.

## A. Resource Requirements

IEEE’s bibliography style has several unique attributes that increase the complexity of BIBTEX styles that attempt to mimic it. Because the primary design goal of IEEEtran.bst is to reproduce the IEEE bibliography style as accurately and as fully as possible, IEEEtran.bst will consume significantly more computation resources (especially memory) during execution than many other BIBTEX style files. Most modern BIBTEX installations will be able to meet these demands without problem. However, some earlier BIBTEX platforms, especially those running on the MS Windows operating system, may be

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IV. Extended Research

# REFERENCES

1. M. Shell. (2007) IEEEtran webpage on CTAN. [Online]. Available: <http://www.ctan.org/tex-archive/macros/latex/contrib/IEEEtran/>
2. (2007) The IEEE website. [Online]. Available: <http://www.ieee.org/>[3] M. Shell. (2007) IEEEtran homepage. [Online]. Available: [http:](http://www.michaelshell.org/tex/ieeetran/)

[//www.michaelshell.org/tex/ieeetran/](http://www.michaelshell.org/tex/ieeetran/)

1. O. Patashnik. (1988, Feb.) BIBTEXing. btxdoc.pdf. [Online]. Available: <http://www.ctan.org/tex-archive/biblio/bibtex/contrib/doc/>
2. N. Markey. (2005, Oct.) Tame the beast — the b to x of

BIBTEX. [Online]. Available: [http://tug.ctan.org/tex-archive/info/bibtex/ tamethebeast/](http://tug.ctan.org/tex-archive/info/bibtex/tamethebeast/)

1. D. Hoadley and M. Shell. (2007, Jan.) BIBTEX tips and FAQ. btxFAQ.pdf. [Online]. Available: [http://www.ctan.org/tex-archive/biblio/ bibtex/contrib/doc/](http://www.ctan.org/tex-archive/biblio/bibtex/contrib/doc/)
2. R. Fairbairns. (2007, Jan.) The TEX FAQ. [Online]. Available: <http://www.tex.ac.uk/cgi-bin/texfaq2html/>
3. K.-J. Kim. (2004, Apr.) A BIBTEX guide via examples. bibtex\_guide.pdf. [Online]. Available: <http://www.geocities.com/kijoo2000/>
4. N. H. F. Beebe. (2006, Aug.) TEX user group bibliography archive. [Online]. Available: [http://www.math.utah.edu:8080/pub/tex/ bib/index-table.html](http://www.math.utah.edu:8080/pub/tex/bib/index-table.html)