

The easychair Class File

Documentation and Guide, for Authors and Editors

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Abstract

In order to ease the lives of authors, editors, and trees, we present an easy-to-read guide to the easy-to-use `easychair` L^AT_EX2e document style class for EasyChair-based electronic publishing of workshop and conference proceedings.

1 Introduction

For quick typesetting instructions please skip to Section 2.

The `easychair` class was designed to be easy to use, and specifically favoring electronic publishing by the EasyChair conference system [24]. EasyChair is a free conference management system that is flexible, easy to use, and has many features to make it suitable for various conference models. It is currently probably the most commonly used conference management system [24]. The `easychair` class was designed according to some requirements, which are described in Appendix A.



Figure 1: EasyChair logo

2 Typesetting

Typesetting with `easychair` is, well, easy. Just by using the document class entry in the document's preamble as follows: `\documentclass{easychair}` the typesetting work is nearly done. The `easychair` class is a relatively conservative extension of the standard `article` class, so most of the environments, section headers, etc. defined by `article` are available.

G. Sutcliffe, A. Voronkov (eds.); `easychair` 1.0, 2008, volume 1, issue: 1, pp. 1-8

*Did all the difficult work

†Did testing and provided a lot of suggestions

‡Masterminded EasyChair

2.1 Generalities

The following are the general default parameters `easychair` introduces into the typesetting aspect of articles. Do not alter these – papers deviating from the formatting standards will be automatically rejected.

1. The default paper size is US letter. It can be explicitly set to A4 (`a4paper`) or letter (`letterpaper`) paper in the document class entry, e.g., `\documentclass[a4paper]{easychair}`. The print area for both letter and A4 paper sizes is 16cm × 9in.
2. The base font is Times New Roman-like, and the sans-serif font is Helvetica. The base font size is 11pt (in deference to senior *scientific eyes*¹).
3. The references list is condensed. The default bibliography styles, such as `plain`, `abbrv`, and `alpha`, are suggested.
4. PNG, JPG, and PDF images are supported, i.e., those that are supported by the standard `graphicx` package [2], and render nicely in online versions of PDF documents. This document shows examples of JPG and PDF images, in Figures 1 3.

2.2 Front Matter

The front matter of an `easychair` article follows the `article` style, augmented with the `\titlerunning` and `\authorrunning` commands for use by authors, and the `\volumeinfo` for use by editors. For the `\author` command with multiple authors, use `\and` to separate authors from different institutions. If the authors are from the same institution they can be separated by commas or `\\` preceding their institution. If the order of authors from the same institution is not consecutive, follow the same principle as for authors from the separate institutions. The recommended generic format is

```
\author{FirstName FamilyName\\
        Affiliation\\
        City, Country\\
\and
        FirstName FamilyName\\
        Affiliation\\
        City, Country\\
\and
        ...
}
```

Authors must set the `\titlerunning` and `\authorrunning`. The recommended generic format is

```
\authorrunning{FamilyName, FamilyName, ...}
```

Figure 2 is the authors’ front matter of this document.

2.3 Sections and Paragraphs

Section and paragraph headings in `easychair` are invoked via the standard commands, such as `\section`, `\subsection`, `\subsubsection`, and `\paragraph`. Generally, every non-trivial word must be capitalized according to general capitalization guidelines. Paragraph headings must have a trailing period. See the examples in this document, e.g., Section 2 is a section, this (Section 2.3) is a subsection, and Section 2.3.1 is a subsubsection.

¹Whatever “scientific eyes” may mean :-)

```

\title{The {\easychair} Class File\\
      Documentation and Guide, for Authors and Editors}
\titlerunning{The {\easychair} Class File}

\author{Serguei A. Mokhov\thanks{Did all the difficult work}\\
      Concordia University\\
      Montreal, Quebec, Canada\\
\and
      Geoff Sutcliffe\thanks{Did testing and provided a lot of suggestions}\\
      University of Miami\\
      Miami, USA\\
\and
      Andrei Voronkov\thanks{Masterminded EasyChair}\\
      University of Manchester\\
      Manchester, United Kingdom\\
}
\authorrunning{Mokhov, Sutcliffe, Voronkov}

\maketitle

```

Figure 2: Example front matter

2.3.1 Subsubsection Heading

This is a subsubsection.

Paragraph header. This is a paragraph. One way of saving space when hyper-references are not essential is to use paragraphs instead of subsubsections.

2.4 References

References must be provided in a .bib file, so that BIB_T_EX can be used to generate the references in a consistent style in a volume. The preferred styles are plain and alpha. For example, the references for this paper are generated from the lines

```

\bibliographystyle{plain}
\bibliography{easychair}

```

2.5 Page Numbering

Page numbers are at the middle-bottom of every page. Authors must leave the page numbers in as-is. When the proceedings are prepared, the volume editors will insert the page numbers (see Section 2.6).

2.6 For Editors

If you are not a proceedings volume editor, you may safely skip this section. The editors have a command to the starting page number, volume and issue numbers, etc. The command goes into the front matter of the document. The first parameter is the editor(s)’s name(s). The second parameter is the number of the editors: if there is more than one then the label “(ed.)” becomes plural “(eds.)”. The rest of the parameters are self-explanatory. For example

```

\volumeinfo
  {J. Bloe}    % editor(s)
  {1}         % No. of editors
  {CONF 2008} % event title
  {1}         % volume number
  {4}         % issue
  {134}       % starting page number

```

3 Installation and Usage Instructions

3.1 Installation

The “installation” of the `easychair` document class is easy. Download the `easychair.zip` package and unzip it in the directory where you will prepare your paper. You will get the following files, out of which you may need to keep only the `easychair.cls` style class if you are familiar with the rest of the files and do not require them to get started.

- `easychair.cls` – the class file that this is all about.
- `easychair-letter.pdf` – the PDF version of this guide rendered using the `letterpaper` option, and `easychair-a4.pdf` – the PDF version of this guide rendered using `a4paper` option.
- `easychair.tex` – the \LaTeX source of this guide, and `easychair.bib` – the supporting bibliography entries found starting on page 7.
- `Makefile` – a “project” file for `make`, to automate compilation of this document on UNIX/Linux-like platforms, and `easychair.tcp` – a “project” file for `TeXnicCenter`, to automate compilation of this document on Windows. See Section 3.4.
- `logoEC.pdf` – the PDF version of the EasyChair logo rendered in Figure 1, and `throneEC.jpg` – the JPG version of the easy throne rendered in Figure 3.

3.2 Required Packages

The `easychair` class relies only on packages deemed standard and shipped by most \LaTeX distributions in the worlds of Linux (`tetex`), MacOS X, and Windows (via Cygwin or `MiKTeX`). If for some reason your distribution is old or doesn’t have the packages listed below, you can always obtain a copy from CTAN [20].

- `inputenc` [10] – with the default option `utf8`, primarily to allow for UTF-8 characters.
- `url` [1] – to provide URL rendering support for the monospaced font, which takes care of special characters as well as line wrapping.
- `hyperref` [14] – to allow hyperlinking of URLs and cross references within an article. Its options are set to either `letterpaper` or `a4paper`, depending on the `\documentclass` options.
- `graphicx` [2] – the standard package for rendering PNG, JPG, and PDF graphic images, primarily in figure environments.
- `mathptmx` [16] – Times base font for compactness.

- `helvet` [17] – Helvetica as `sans-serif`.
- `listings` [12] – to allow highlighted source code listing styles.
- `latexsym` [21] – to provide common math and other symbols.
- `amsthm` [19] – to provide \mathcal{AMS} theorem-like environments.
- `empheq` [9] – to provide equation environments, etc.
- `geometry` [22] – to set `easychair` margins, outlined in Section 2.1.
- `lastpage` [6] – to allow computationally referencing the last page.
- `fancyhdr` [23] – for running heads.
- `footmisc` [3] – to ensure that footnotes are always at the bottom.

3.3 Recommended Packages

Here is a list of some packages that this guide’s authors have experimented with, and which are suitable for inclusion if needed by article authors. These packages must be loaded using `\usepackage`. In general, authors may use any standard packages provided they do not change the basic layout and font settings established by the `easychair` class. Such packages must be provided with the submission of articles.

- `rotating` [4] – to rotate floats (figures and tables) on the page, when wide tables or figures do not fit in portrait layout.
- `pdflscape` [13] – similar to `rotating`, but also allows rotating text to make it conveniently viewable in a PDF viewer that supports individual rotated pages. A possible disadvantage is that a page break is forced, which may create gaps before or after the landscape page.
- `algorithm2e` [5] – provides a figure-like algorithm environment for formal algorithm presentation with highlighting.

3.4 Compiling

`pdflatex` [8] is the preferred tool for producing PDF files with `easychair` class documents. The author kit (`easychair.zip`) includes some minimal automation that authors can use at their discretion.

- Linux and UNIX-like platforms (also works under Cygwin and MacOS X): A `Makefile` is provided for the GNU `make` [18] utility, so this document can be compiled by typing `make` at the terminal prompt (on the systems where both GNU and non-GNU versions of `make` are installed, one may need to use `gmake`).
- Microsoft Windows: `TEXnicCenter` [25] and `MiKTEX` [15] are tools for \LaTeX processing under Microsoft Windows. The former provides a GUI front-end to \LaTeX , and the latter is the Windows native-compiled `tetex` binaries and standard packages with a comprehensive package update tool. The `easychair.tcp` project file is provided for `TEXnicCenter` users.
- Mac OS X: `TeXShop` [11] is a tool for \LaTeX processing under Mac OS X. It provides a GUI front-end to \LaTeX .

3.5 Bug Reports

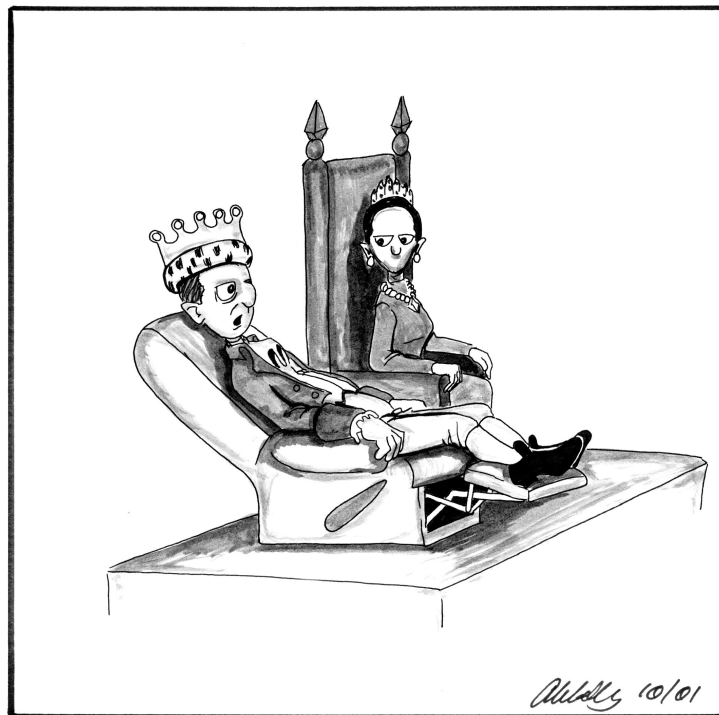
Please report bugs, errors, and omissions you find with the **easychair** class to its primary author and current maintainer, Serguei Mokhov, at `mokhov@cs.concordia.ca`. Any constructive feedback is always welcome.

4 Conclusion

An article that occupies approximately 17 LNCS formatted pages, using the 10pt base font size, takes approximately 14 **easychair** pages, using the 11pt base font size.

4.1 Future Work

We plan to further strengthen the **easychair** class and promote it for electronic publishing for EasyChair-powered conferences and workshops, and take over the world, as shown in Figure 3.



"Because I like it better than the old one,
that's why."

Figure 3: Easy Throne

4.2 Acknowledgments

- Aleksander Kosenkov for the graphics that are used here, and the EasyChair website.
- The CTAN [20] and \LaTeX communities [25, 15].
- Peter Grogono for his neat kickstart \LaTeX introduction [7].

4.3 History

- easychair v. 1.0 – June 2008, initial release

References

- [1] Donald Arseneau. url: Verbatim with URL-sensitive line breaks. <http://www.ctan.org/tex-archive/help/Catalogue/entries/url.html>, last viewed May 2008, 1986–2007.
- [2] David Carlisle. graphicx: Enhanced support for graphics. <http://www.ctan.org/tex-archive/help/Catalogue/entries/graphicx.html>, last viewed May 2008, 1986–2006.
- [3] Robin Fairbairns. footmisc: A range of footnote options. <http://www.ctan.org/tex-archive/help/Catalogue/entries/footmisc.html>, last viewed May 2008, 1986–2007.
- [4] Robin Fairbairns and Sebastian Rahtz. rotating: Rotation tools, including rotated full-page floats. <http://www.ctan.org/tex-archive/help/Catalogue/entries/rotating.html>, last viewed May 2008, 1986–2006.
- [5] Christophe Fiorio. algorithm2e: Floating algorithm environment with algorithmic keywords. <http://www.ctan.org/tex-archive/help/Catalogue/entries/algorithm2e.html>, last viewed May 2008, 1986–2007.
- [6] Jeffrey Goldberg. lastpage: Reference last page for Page N of M type footers. <http://www.ctan.org/tex-archive/help/Catalogue/entries/lastpage.html>, last viewed May 2008, 1986–2006.
- [7] Peter Grogono. *A L^AT_EX2_ε Gallimaufry. Techniques, Tips, and Traps*. Department of Computer Science and Software Engineering, Concordia University, Montreal, Canada, March 2001. <http://www.cse.concordia.ca/~grogono/Writings/gallimaufry.pdf>, last viewed May 2008.
- [8] Carl Gutwin. Instructions for pdflatex. <http://www.cs.usask.ca/~gutwin/gi/pdflatex.htm>, last viewed June 2008, 2006.
- [9] Morten Høgholm. emphq: EMPHasizing EQuations. <http://www.ctan.org/tex-archive/help/Catalogue/entries/emphq.html>, last viewed May 2008, 1986–2007.
- [10] Alan Jeffrey and Frank Mittelbach. inputenc: Accept different input encodings. <http://www.ctan.org/tex-archive/help/Catalogue/entries/inputenc.html>, last viewed May 2008, 1986–2006.
- [11] Richard Koch, Max Horn, Gerben Wierda, and Various Contributors. T_EXshop. <http://www.texshop.org>, 2001–2007.
- [12] Brooks Moses and Carsten Heinz. listings: Typeset source code listings using L^AT_EX. <http://www.ctan.org/tex-archive/help/Catalogue/entries/listings.html>, last viewed May 2008, 1986–2006.
- [13] Heiko Oberdiek. pdfscape: Make landscape pages display as landscape. <http://www.ctan.org/tex-archive/help/Catalogue/entries/pdfscape.html>, last viewed May 2008, 1986–2007.
- [14] Heiko Oberdiek and Sebastian Rahtz. hyperref: Extensive support for hypertext in L^AT_EX. <http://www.ctan.org/tex-archive/help/Catalogue/entries/hyperref.html>, last viewed May 2008, 1986–2008.
- [15] Christian Schenk and MiK_TE_X Contributors. MiK_TE_X. miktex.org, last viewed June 2008, 2008.
- [16] Walter Schmidt, Alan Jeffrey, Sebastian Rahtz, and Ulrik Vieth. mathptmx: Use Times as default text font, and provide maths support. <http://www.ctan.org/tex-archive/help/Catalogue/entries/mathptmx.html>, last viewed May 2008, 1986–2006.
- [17] Walter Schmidt and Sebastian Rahtz. helvet: Font support for common PostScript fonts. <http://www.ctan.org/tex-archive/help/Catalogue/entries/psnfss.html>, last viewed May 2008, 1986–2007.
- [18] Richard Stallman, Roland McGrath, Paul Smith, and GNU Project. *GNU Make*. Free Software Foundation, Inc., 1997–2000. <http://www.gnu.org/software/make/>.
- [19] The American Mathematical Society. amsthm: L^AT_EX package for theorem setup (AMS style). <http://www.ctan.org/tex-archive/help/Catalogue/entries/amsthm.html>, last viewed May 2008, 1986–2007.
- [20] The CTAN team. CTAN: the comprehensive T_EX archive network. ctan.org, 1992–2008.

- [21] The LaTeX Team. `latexsym`: Base sources of \LaTeX . <http://www.ctan.org/tex-archive/help/Catalogue/entries/latex-base.html>, last viewed May 2008, 1986–2006.
- [22] Hideo Umeiki. `geometry`: Flexible and complete interface to document dimensions. <http://www.ctan.org/tex-archive/help/Catalogue/entries/geometry.html>, last viewed May 2008, 1986–2006.
- [23] Piet van Oostrum. `fancyhdr`: Extensive control of page headers and footers in $\text{\LaTeX}2\epsilon$. <http://www.ctan.org/tex-archive/help/Catalogue/entries/fancyhdr.html>, last viewed May 2008, 1986–2006.
- [24] Andrei Voronkov. EasyChair conference system. easychair.org, 2004–2008.
- [25] Sven Wiegand and \TeX nicCenter Contributors. \TeX nicCenter. texniccenter.org, last viewed June 2008, 1998–2006.

A `easychair` Requirements Specification

The following high-level requirements were set for the development of the `easychair` class, and were refined as development went along.

1. The style should be easy to use. The average \LaTeX user should not need to read a long manual.
2. It should be economical in space but the text should be nice-to-read.
3. It should use fonts producing a reasonable-quality PDF.
4. The bibliography should produce hyperlinks.
5. Sections should produce menu sections in PDF.
6. The text should look good on both A4 and letter paper.
7. The style should be single-column.
8. The print area should be 16cm wide by 9in high with 11pt base font size.
9. Running heads.
10. A way to specify the first page number.
11. A way to specify the volume name and number, and have it printed.