

Formatting Your AAI Paper Using the L^AT_EX Style Files

AAAI Press

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Abstract

This document provides a very brief overview of the AAI style file for L^AT_EX 2_ε, as well as some general instructions on using the Times Roman font set. To use this style file, you must already be familiar with L^AT_EX and must read the general formatting instructions supplied in your author kit. This document just gives you some brief instructions on using the aai.sty style file. Most common formatting commands are included in this document.

About These Instructions

In the past, this instruction file has contained general formatting instructions for persons preparing their papers for an AAI proceedings. Those instructions are now available on AAI's website in PDF format only, and are part of the general author kit distributed to all authors whose papers have been accepted by AAI for publication in an AAI Conference Proceedings. This document only contains specific information of interest to L^AT_EX users.

Warning: If you are not an experienced L^AT_EX user, AAI does **not** recommend that you use L^AT_EX to format your paper. No support for LaTeX is provided by AAI, and these instructions and the accompanying style files are **not** guaranteed to work. If the results you obtain are not in accordance with the specifications you received in your packet (or online), you must correct the style files or macro to achieve the correct result. AAI **cannot** help you with this task. The instructions herein are provided as a general guide for experienced L^AT_EX users who would like to use that software to format their paper for an AAI Press proceedings or technical report or AAI working notes. These instructions are generic. Consequently, they do not include specific dates, page charges, and so forth. Please consult your specific written conference instructions for details regarding your submission.

Output

To ready your paper for publication, please read the "Instructions for Authors" paper. This document is available on AAI's website, and is supplied in your author kit.

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Paper Size

If you are outside the US, the L^AT_EX default paper size has most likely been changed from "letterpaper" to "a4." Because we require that your electronic paper be formatted in US letter size (so that all the papers in the CD-ROM are uniform in size), you will need to change the default back to US letter size. Assuming you are using the 2_ε version of L^AT_EX you can do this by including the [letterpaper] option at the beginning of your file: `\documentclass[letterpaper]{article}`.

The AAI Style File

The latest version of the AAI style file is available on AAI's website. Point your web browser to <http://www.aai.org/Publications/Author/macros-link.html> and download "The L^AT_EX style file." You should download this file and place it in a file named "aai.sty" in the T_EX search path. Placing it in the same directory as the paper should also work. (We recommend that you download "The Complete Set of LaTeX Macros and Instructions for AAI Proceedings" so that you will have the latest bug list and instruction set.

Using the Style File

In the L^AT_EX source for your paper, place the following line after the `\documentclass` line but before `\begin{document}`:

```
\usepackage{aai}  
\usepackage{times}  
\usepackage{helvet}  
\usepackage{courier}
```

In most instances, this is all you need to do to format your paper in the Times font. The helvet package will cause Helvetica to be used for sans serif, and the courier package will cause Courier to be used for the typewriter font. These files are part of the PSNFSS2_ε package, which is freely available from many Internet sites (and is often part of a standard installation. If using these commands does not work for you (and you are using L^AT_EX 2_ε), you will need to refer to the fonts information found later on in this document.

Multiple Authors

If you have multiple authors in your paper, we suggest you consult the excellent paper prepared by George Ferguson. He has supplied a number of commands that you can use to format the author and address lines in your paper, as well as specific citation and bibliography commands. This paper is included in the complete set of L^AT_EX instructions, and is also available separately on AAAI's website.

Copyright

If you were required to transfer copyright of your paper to AAAI, you must include the AAAI copyright notice and web site address on all copies of your paper, whether electronic or paper (including the camera copy you provide to AAAI.) If you use the latest AAAI style file, the copyright line will be inserted for you automatically. (If your paper doesn't include the copyright slug and it should, the paper will be returned to you for reformatting.)

Fonts

Papers published in AAAI publications must now be formatted using the Times family of fonts, so that all papers in the proceedings have a uniform appearance. If you've been using Computer Modern, the first advantage you will see to using Times is that the character count is smaller — that means you can put more words on a page!

Type 3 Fonts

You've probably seen PDF files containing type 3 bitmapped fonts on the web (there are files like that on AAAI's web site too). They're often the huge files that open slowly, scroll very slowly, and aren't readable unless they're enlarged many times. Aside from these problems, these files usually contain fonts designed for 300 dpi printers, so they print at 300 dpi even if the printer resolution is 1200 dpi or higher. They also often cause high resolution imagesetter devices to crash and sometimes the PDF indexing software we use can't read them.

Because of these and other problems, as well as for purposes of uniformity, **AAAI will not longer accept electronic files where the text and headings are formatted using obsolete type 3 fonts.** Fortunately, there are effective workarounds that will prevent your file from embedding type 3 bitmapped fonts.

The easiest workaround is to use the times, helvet, and courier packages with L^AT_EX 2_ε. (Note that papers formatted in this way will still use Computer Modern for the mathematics. To make the math look good, you'll either have to use Symbol or Lucida, or you will need to install type 1 Computer Modern fonts—for more on these fonts, see the next section.)

Obtaining Type 1 Computer Modern

If you *must* use Computer Modern for the mathematics in your paper (you can't use it for the text anymore) you will need to download the type 1 Computer fonts. They are available without charge from the American Mathematical Soci-

ety. Point your browser to the following url to find them: <http://www.ams.org/tex/type1-fonts.html>

Type 1 versions of Computer Modern are also available (for free) from the BaKoMa collection at <http://xxx.lanl.gov/ftp/pub/fonts/x-windows/>

Making dvips Behave

If your Postscript output still includes type 3 fonts, you should run dvips with option “* -Ppdf.” (If your machine or site has type 1 fonts, they will probably be loaded.) If that doesn't work, you'll have to download the fonts and create a font substitution list.

Making A Font Substitution List Once you've installed the type 1 Computer Modern fonts, you'll need to get dvips to refrain from embedding the bitmap fonts. To do this, you'll need to create a font substitution list for use by dvips. Each line of this file should start with the name of the font that TeX uses, as shown below:

```
cmb10 </usr/local/lib/tex/fonts/type1/cmb10.pfb
cmbsy10 </usr/local/lib/tex/fonts/type1/cmbsy10.pfb
cmbsy6 </usr/local/lib/tex/fonts/type1/cmbsy6.pfb
cmbsy7 </usr/local/lib/tex/fonts/type1/cmbsy7.pfb
cmbsy8 </usr/local/lib/tex/fonts/type1/cmbsy8.pfb
cmbsy9 </usr/local/lib/tex/fonts/type1/cmbsy9.pfb
cmbx10 </usr/local/lib/tex/fonts/type1/cmbx10.pfb
cmbx12 </usr/local/lib/tex/fonts/type1/cmbx12.pfb
```

In this example, the assumption is that you have PFB versions of the Computer Modern fonts located in the directory `/usr/local/lib/tex/fonts/type1/`. The file name should be the type 1 encoding of the Postscript font in PFB or PFA format.

If your home directory contains a file called `.dvipsrc` containing the line: “* p +fontMapFileName” that font map will be used by dvips for all the jobs you run. You can also create a file, like “`config.embed`” that contains that line. If you do that, when you invoke dvips with the command “`dvips -P embed ...`,” dvips will look for `config.embed` in the current directory (and perhaps your home directory). You may need to change how dvips looks for config files. To do this, read the “environment variables” section of the dvips documentation.

If you need more information, or a better and more technical explanation of how to make this all work, Kendall Whitehouse has written detailed instructions on “Creating Quality Adobe PDF Files from TeX with DVIPS.” It is available from Adobe's Web Site, and other sites on the Internet (you'll need to do a quick search for it).

Citations and References

Be sure to read the “Formatting Instructions for Authors” paper that was included in your author kit (and is available on the AAAI website. L^AT_EX will handle your citations improperly unless you change its configuration and use the correct commands. The AAAI style file and the BibTeX files will help you in this regard. George Ferguson's paper shows you the proper commands necessary to implement AAAI citation and reference style.

Illustrations and Figures

Figures, drawings, tables, and photographs should be placed throughout the paper near the place where they are first discussed. Do not group them together at the end of the paper. \LaTeX will sometimes put portions of the figure or table in the margin. If this happens, you need to scale the figure or table down, because **nothing** (even a line!) is allowed to intrude into the margins.

Electronic Submissions

To aid in the creation of a permanent electronic archive of all its publications and for creation of the CD-ROM, AAI requires electronic submission of your paper, its abstract, and author–title information, in addition to camera-ready hard copy.

As a \LaTeX user, you need to pay attention to the special requirements imposed on you. In particular, although you are welcome to submit a PDF version of your paper, we also require that you submit, in a tar, zipped, or stuffed archive, all the source files (including any figures) you used to create your paper, as well as a dvi and PostScript version of the paper. We require this because nearly all the problems we have with electronic submissions come from persons using \LaTeX . Many of the problems would be easy to fix if we had all the source files, which is why we want you to send them to us. Even if we can't take the time to fix the file, we can usually tell quite quickly what is wrong if we have your source, and give you directions on how you might fix it yourself.

Possible Bugs in the AAI Macros

Some users have found that the `aaai.sty` does not work properly at their site. They have submitted suggestions for improvement of the macro. You will find those suggestions in the \LaTeX complete set, and also as a separate file on the AAI website. Some of these suggestions have already been implemented, while others seem to be dependent on individual site conditions. If you're having problems with `aaai.sty`, we suggest you look at the "bug list."

Inquiries

If you have any general questions about the preparation or submission of your paper, please contact AAI Press at `press@aaai.org`. If you have technical questions about implementation of the macros, please contact an expert at your site. We do not provide technical support for \LaTeX or any other software package. If you are new to \LaTeX your paper is fairly straightforward, and doesn't include multilevel equations, you will probably find that you can format it much faster using a word-processing program like Microsoft Word. This is especially true if your paper includes a number of pictures or graphics.

Acknowledgments

AAI is especially grateful to Peter Patel Schneider for his work in implementing the `aaai.sty` file. We also acknowledge with thanks the work of George Ferguson for his guide

to using the style and BibTeX files, as well as the many others who have, from time to time, send in suggestions on improvements to the AAI macros.

The preparation of the \LaTeX and BibTeX files that implement these instructions was supported by Schlumberger Palo Alto Research, AT&T Bell Laboratories, Morgan Kaufmann Publishers, and AAI Press.

Thank you for reading these instructions carefully. We look forward to receiving your camera-ready copy!