

AAAI Press Formatting Instructions for Authors Using L^AT_EX — A Guide

Nathaniel Schleif, Andrew Maule, Harry Zhou, Stewart Kerr, Noah Stafford
University of Wisconsin-Madison

Abstract

AAAI creates proceedings, working notes, and technical reports directly from electronic source furnished by the authors. To ensure that all papers in the publication have a uniform appearance, authors must adhere to the following instructions.

Introduction

We need source and PDF files that can be used in a variety of ways and can be output on a variety of devices. The design and appearance of the paper is strictly governed by the `aaai` style file (`aaai19.sty`).

Methods

The latest version of the AAAI style file is available on AAAI's website. Download this file and place it in the \TeX search path. Placing it in the same directory as the paper should also work. You must download the latest version of the complete AAAI Author Kit so that you will have the latest instruction set and style file.

Methods Subsection

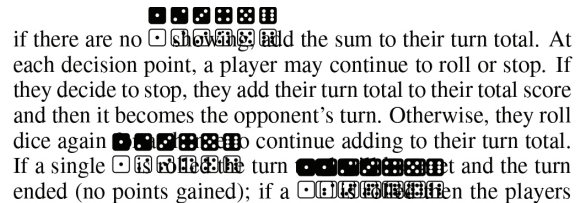
In the \LaTeX source for your paper, you **must** place the following lines as shown in the example in this subsection. This command set-up is for three authors. Add or subtract author and address lines as necessary, and uncomment the portions that apply to you. In most instances, this is all you need to do to format your paper in the Times font. The `helvet` package will cause Helvetica to be used for sans serif. These files are part of the `PSNFSS2e` package, which is freely available from many Internet sites (and is often part of a standard installation).

Commands and Packages That May Not Be Used

Figures

Your paper must compile in PDF \LaTeX . Consequently, all your figures must be `.jpg`, `.png`, or `.pdf`. You may not use the `.gif` (the resolution is too low), `.ps`, or `.eps` file format for your figures.

Copyright © 2019, Association for the Advancement of Artificial Intelligence (www.aaai.org). All rights reserved.



if there are no 1s or 2s, the player adds the sum to their turn total. At each decision point, a player may continue to roll or stop. If they decide to stop, they add their turn total to their total score and then it becomes the opponent's turn. Otherwise, they roll dice again to continue adding to their turn total. If a single die shows a 1 or 2, the turn ends (no points gained); if a die shows a 1 or 2, the players

Figure 1: Using the `trim` and `clip` commands produces fragile layers that can result in disasters (like this one from an actual paper) when the color space is corrected or the PDF combined with others for the final proceedings. Crop your figures properly in a graphics program – not in \LaTeX

When you include your figures, you must crop them **outside** of \LaTeX . The command `\includegraphics*[clip=true, viewport 0 0 10 10]...` might result in a PDF that looks great, but the image is **not really cropped**. The full image can reappear (and obscure whatever it is overlapping) when page numbers are applied or color space is standardized. Figures 1, and 2 display some unwanted results that often occur.

How to do citations

Citations within the text should include the author's last name and year, for example (Newell 1980). Append lowercase letters to the year in cases of ambiguity. Multiple authors should be treated as follows: (Feigenbaum and Englemore 1988) or (Ford, Hayes, and Glymour 1992). In the case of four or more authors, list only the first author, followed by et al. (Ford et al. 1997).

Extracts

Long quotations and extracts should be indented ten points from the left and right margins.

This is an example of an extract or quotation. Note the indent on both sides. Quotation marks are not necessary if you offset the text in a block like this, and properly identify and cite the quotation in the text.

Table 1: Example table

<code>\abovecaption</code>	<code>\abovedisplay</code>	<code>\addevensidemargin</code>	<code>\addsidemargin</code>
<code>\addtolength</code>	<code>\baselinestretch</code>	<code>\belowcaption</code>	<code>\belowdisplay</code>
<code>\break</code>	<code>\clearpage</code>	<code>\clip</code>	<code>\columnsep</code>
<code>\float</code>	<code>\input</code>	<code>\input</code>	<code>\linespread</code>
<code>\newpage</code>	<code>\pagebreak</code>	<code>\renewcommand</code>	<code>\setlength</code>
<code>\text height</code>	<code>\tiny</code>	<code>\top margin</code>	<code>\trim</code>
<code>\vskip{-</code>	<code>\vspace{-</code>		

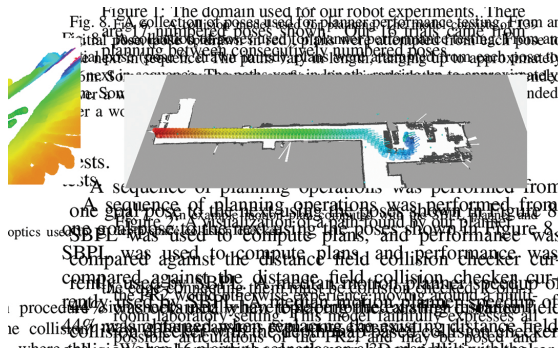


Figure 1: The domain used for our robot experiments. There are 1000 points in the domain, and the path is shown in red. The path is shown in red, and the obstacles are shown in grey. The path is shown in red, and the obstacles are shown in grey.

Grid Search Domain
View Selection
 In these experiments, we ran our planner on a much larger set of trials. The trials were generated by randomly selecting a state, and then randomly selecting a path. The only requirement of the path was that it was a valid path. We ran these trials on a computer with a 3.4 GHz processor and 8 GB of RAM. The trials were run on a computer with a 3.4 GHz processor and 8 GB of RAM. The trials were run on a computer with a 3.4 GHz processor and 8 GB of RAM.

Figure 2: Adjusting the bounding box instead of a

actually removing the unwanted data resulted multiple layers in this paper. It also needlessly increased the PDF size. In this case, the size of the unwanted layer doubled the paper's size, and produced the following surprising results in final production. Crop your figures properly in a graphics program. Don't just alter the bounding box.

Table 2: Example table 2

<code>authblk</code>	<code>babel</code>	<code>caption</code>	<code>ckj</code>
<code>dvips</code>	<code>epsf</code>	<code>epsfig</code>	<code>euler</code>
<code>float</code>	<code>fullpage</code>	<code>geometry</code>	<code>graphics</code>
<code>hyperref</code>	<code>layout</code>	<code>linespread</code>	<code>lmodern</code>
<code>maltepaper</code>	<code>natbib</code>	<code>navigator</code>	<code>pdfcomment</code>
<code>psfig</code>	<code>pstricks</code>	<code>tlenc</code>	<code>titlesec</code>
<code>tocbind</code>	<code>ulem</code>		

Footnotes

Avoid footnotes as much as possible; they interrupt the reading of the text. When essential, they should be consecutively numbered throughout with superscript Arabic numbers. Footnotes should appear at the bottom of the page, separated from the text by a blank line space and a thin, half-point rule.

Section Headings. Sections should be arranged and headed as follows:

Acknowledgments. The acknowledgments section, if included, appears after the main body of text and is headed "Acknowledgments." This section includes acknowledgments of help from associates and colleagues, credits to sponsoring agencies, financial support, and permission to publish. Please acknowledge other contributors, grant support, and so forth, in this section. Do not put acknowledgments in a footnote on the first page. If your grant agency requires acknowledgment of the grant on page 1, limit the

footnote to the required statement, and put the remaining acknowledgments at the back. Please try to limit acknowledgments to no more than three sentences.

References The references section should be labeled "References" and should appear at the very end of the paper (don't end the paper with references, and then put a figure by itself on the last page). A sample list of references is given later on in these instructions. Please use a consistent format for references. Poorly prepared or sloppy references reflect badly on the quality of your paper and your research. Please prepare complete and accurate citations.

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. If placed at the top or bottom of the paper, illustrations may run across both columns. Figures must not invade the top, bottom, or side margin areas. Figures must be inserted using the `\usepackage{graphicx}`. Number figures sequentially, for example, figure 1, and so on.

The illustration number and caption should appear under the illustration. Labels, and other text with the actual illustration must be at least nine-point type.

If your paper includes illustrations that are not compatible with PDF_{TEX} (such as .eps or .ps documents), you will need to convert them. The `epstopdf` package will usually work for eps files. You will need to convert your ps files to PDF however.

L^AT_EX Overflow. L^AT_EX users please beware: L^AT_EX will sometimes put portions of the figure or table or an equation in the margin. If this happens, you need to scale the figure or table down, or reformat the equation. **Check your log file!** You must fix any overflow into the margin (that means no overfull boxes in L^AT_EX). **Nothing is permitted to intrude into the margin or gutter.**

The most efficient and trouble-free way to fix overfull boxes in graphics is with the following command:

```
\resizebox{.9\columnwidth}{!}{ }
```

Using Color. Use of color is restricted to figures only. It must be WACG 2.0 compliant. (That is, the contrast ratio must be greater than 4.5:1 no matter the font size.) It must be CMYK, NOT RGB. It may never be used for any portion of the text of your paper. The archival version of your paper will be printed in black and white and grayscale. The web version must be readable by persons with disabilities. Consequently, because conversion to grayscale can cause undesirable effects (red changes to black, yellow can disappear, and so forth), we strongly suggest you avoid placing color figures in your document. If you do include color figures, you must (1) use the CMYK (not RGB) colorspace and (2) be mindful of readers who may happen to have trouble distinguishing colors. Your paper must be decipherable without using color for distinction.

Drawings. We suggest you use computer drawing software (such as Adobe Illustrator or, (if unavoidable), the drawing tools in Microsoft Word) to create your illustrations. Do not use Microsoft Publisher. These illustrations will look best if all line widths are uniform (half- to two-point in size), and you do not create labels over shaded areas. Shading should be 133 lines per inch if possible. Use Times Roman or Helvetica for all figure call-outs. **Do not use hairline width lines** — be sure that the stroke width of all lines is at least .5 pt. Zero point lines will print on a laser printer, but will completely disappear on the high-resolution devices used by our printers.

Photographs and Images. Photographs and other images should be in grayscale (color photographs will not reproduce well; for example, red tones will reproduce as black, yellow may turn to white, and so forth) and set to a minimum of 300 dpi. Do not prescreen images.

Resizing Graphics. Resize your graphics **before** you include them with LaTeX. You may **not** use trim or clip options as part of your `\includegraphics` command. Resize the media box of your PDF using a graphics program instead.

Fonts in Your Illustrations You must embed all fonts in your graphics before including them in your LaTeX document.

References

The AAI style includes a set of definitions for use in formatting references with BibTeX. These definitions make the bibliography style fairly close to the one specified below. To use these definitions, you also need the BibTeX style file “aaai.bst,” available in the AAI Author Kit on the

AAAI web site. Then, at the end of your paper but before `\enddocument`, you need to put the following lines:

```
\bibliographystyle{aaai} \bibliography{bibfile1,bibfile2,...}
```

Please note that you are required to use `\bibliographystyle{aaai}` for your references. You may not use named, plain, apalike, acm, ieeetr, siam, chicago, or any other style. Use of natbib is also not acceptable. (In addition to natbib, the aaai19.sty file is also incompatible with the hyperref and navigator packages. If you use either, your references will be garbled and your paper cannot be published.) If you used natbib commands, you may put the following in your preamble (after removing `\usepackage{natbib}`)

```
\newcommand{\citet}[1]{\citeauthor{#1} \shortcite{#1}}
\newcommand{\citep}{\cite}
\newcommand{\citealp}[1]{\citeauthor{#1} \citeyear{#1}}
```

References may be the same size as surrounding text. However, in this section (only), you may reduce the size to `\small` if your paper exceeds the allowable number of pages. Making it any smaller than 9 point with 10 point linespacing, however, is not allowed. A more precise method of reducing the size of your references is by means of the following command:

```
\fontsize{9.8pt}{10.8pt} \selectfont
```

You must reduce the size equally for both font size and line spacing, and may not reduce the size beyond `{9.0pt}{10.0pt}`.

The list of files in the `\bibliography` command should be the names of your BibTeX source files (that is, the .bib files referenced in your paper).

The following commands are available for your use in citing references:

`\cite`: Cites the given reference(s) with a full citation. This appears as “(Author Year)” for one reference, or “(Author Year; Author Year)” for multiple references.

`\shortcite`: Cites the given reference(s) with just the year. This appears as “(Year)” for one reference, or “(Year; Year)” for multiple references.

`\citeauthor`: Cites the given reference(s) with just the author name(s) and no parentheses.

`\citeyear`: Cites the given reference(s) with just the date(s) and no parentheses.

Formatted bibliographies should look like the following examples.

Book with Multiple Authors

Engelmore, R., and Morgan, A. eds. 1986. *Blackboard Systems*. Reading, Mass.: Addison-Wesley.

Journal Article

Robinson, A. L. 1980a. New Ways to Make Microcircuits Smaller. *Science* 208: 1019–1026.

Magazine Article

Hasling, D. W.; Clancey, W. J.; and Rennels, G. R. 1983. Strategic Explanations in Consultation. *The International Journal of Man-Machine Studies* 20(1): 3–19.

Proceedings Paper Published by a Society

Clancey, W. J. 1983. Communication, Simulation, and Intelligent Agents: Implications of Personal Intelligent Machines for Medical Education. In *Proceedings of the Eighth International Joint Conference on Artificial Intelligence*, 556–560. Menlo Park, Calif.: International Joint Conferences on Artificial Intelligence, Inc.

Proceedings Paper Published by a Press or Publisher

Clancey, W. J. 1984. Classification Problem Solving. In *Proceedings of the Fourth National Conference on Artificial Intelligence*, 49–54. Menlo Park, Calif.: AAAI Press.

University Technical Report

Rice, J. 1986. Polygon: A System for Parallel Problem Solving, Technical Report, KSL-86-19, Dept. of Computer Science, Stanford Univ.

Dissertation or Thesis

Clancey, W. J. 1979. Transfer of Rule-Based Expertise through a Tutorial Dialogue. Ph.D. diss., Dept. of Computer Science, Stanford Univ., Stanford, Calif.

Forthcoming Publication

Clancey, W. J. 2020. The Engineering of Qualitative Models. Forthcoming.

Proofreading Your PDF

Please check all the pages of your PDF file. Is the page size A4? Are there any type 3, Identity-H, or CID fonts? Are all the fonts embedded? Are there any areas where equations or figures run into the margins? Did you include all your figures? Did you follow mixed case capitalization rules for your title? Did you include a copyright notice? Do any of the pages scroll slowly (because the graphics draw slowly on the page)? Are URLs underlined and in color? You will need to fix these common errors before submitting your file.

Additional Resources

L^AT_EX is a difficult program to master. If you've used that software, and this document didn't help or some items were not explained clearly, we recommend you read Michael Shell's excellent document (testflow doc.txt V1.0a 2002/08/13) about obtaining correct PS/PDF output on L^AT_EX systems. (It was written for another purpose, but it has general application as well). It is available at www.ctan.org in the tex-archive.

Acknowledgments

AAAI is especially grateful to Peter Patel Schneider for his work in implementing the aai.sty file, liberally using the ideas of other style hackers, including Barbara Beeton. We also acknowledge with thanks the work of George Ferguson for his guide to using the style and BibTeX files — which has been incorporated into this document — and Hans Guesgen, who provided several timely modifications, as well as the many others who have, from time to time, sent in suggestions on improvements to the AAAI style.