AAAI Press Anonymous Submission Instructions for Authors Using LaTeX

Anonymous submission

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.

Preparing an Anonymous Submission

This document details the formatting requirements for anonymous submissions. The requirements are the same as for camera ready papers but with a few notable differences:

- Anonymous submissions must not include the author names and affiliations. Write "Anonymous Submission" as the "sole author" and leave the affiliations empty.
- The PDF document's metadata should be cleared with a metadata-cleaning tool before submitting it. This is to prevent leaked information from revealing your identity.
- References must be anonymized whenever the reader can infer that they are to the authors' previous work.
- AAAI's copyright notice should not be included as a footer in the first page.
- You do not need to provide any copyright transfer form at this stage.
- Depending on the conference, you may be required to include a reproducibility checklist or prepare it separately. Check the conference's instructions in their website.
- Similarly, depending on the conference you may be allowed to submit a supplementary technical appendix after the references, or you may be allowed to submit it as a separate document, or you may not be allowed to submit a technical appendix at all.

You can remove the copyright notice and ensure that your names aren't shown by including `submission` option when loading the `aaai2027` package:

```
\documentclass[letterpaper]{article}
\usepackage[submission]{aaai2027}
```

This is an anonymized submission for review purposes only. Distribution, citation, or public sharing of this manuscript is strictly prohibited. Copyright and publication details will appear in the final version if accepted.

The remainder of this document contains the original camera-ready instructions. Any contradiction of the above points ought to be ignored while preparing anonymous submissions.

Camera-Ready Guidelines

Congratulations on having a paper selected for inclusion in an AAAI Press proceedings or technical report! This document details the requirements necessary to get your accepted paper published using PDFLaTeX. If you are using Microsoft Word, instructions are provided in a different document. AAAI Press does not support any other formatting software.

The instructions herein are provided as a general guide for experienced LaTeX users. If you do not know how to use LaTeX, please obtain assistance locally. AAAI cannot provide you with support and the accompanying style files are **not** guaranteed to work. If the results you obtain are not in accordance with the specifications you received, you must correct your source file to achieve the correct result.

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. Please review the entire document for specific instructions that might apply to your particular situation. All authors must comply with the following:

- You must use the 2027 AAAI Press LaTeX style file and the aaai2027.bst bibliography style files, which are located in the 2027 AAAI Author Kit (aaai2027.sty, aaai2027.bst).
- You must complete, sign, and return by the deadline the AAAI copyright form (unless directed by AAAI Press to use the AAAI Distribution License instead).
- You must read and format your paper source and PDF according to the formatting instructions for authors.
- You must submit your electronic files and abstract using our electronic submission form **on time.**
- You must pay any required page or formatting charges to AAAI Press so that they are received by the deadline.
- You must check your paper before submitting it, ensuring that it compiles without error, and complies with the guidelines found in the AAAI Author Kit.

Copyright

All papers submitted for publication by AAAI Press must be accompanied by a valid signed copyright form. They must also contain the AAAI copyright notice at the bottom of the first page of the paper. There are no exceptions to these requirements. If you fail to provide us with a signed copyright form or disable the copyright notice, we will be unable to publish your paper. There are **no exceptions** to this policy. You will find a PDF version of the AAAI copyright form in the AAAI AuthorKit. Please see the specific instructions for your conference for submission details.

Formatting Requirements in Brief

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 (aaai2027.sty). **You must not make any changes to the aaai style file, nor use any commands, packages, style files, or macros within your own paper that alter that design, including, but not limited to spacing, floats, margins, fonts, font size, and appearance.** AAAI imposes requirements on your source and PDF files that must be followed. Most of these requirements are based on our efforts to standardize conference manuscript properties and layout. All papers submitted to AAAI for publication will be recompiled for standardization purposes. Consequently, every paper submission must comply with the following requirements:

- Your .tex file must compile in PDFLaTeX — (you may not include .ps or .eps figure files.)
- All fonts must be embedded in the PDF file — including your figures.
- Modifications to the style file, whether directly or via commands in your document may not ever be made, most especially when made in an effort to avoid extra page charges or make your paper fit in a specific number of pages.
- No type 3 fonts may be used (even in illustrations).
- You may not alter the spacing above and below captions, figures, headings, and subheadings.
- You may not alter the font sizes of text elements, footnotes, heading elements, captions, or title information (for references and mathematics, please see the limited exceptions provided herein).
- You may not alter the line spacing of text.
- Your title must follow Title Case capitalization rules (not sentence case).
- LaTeX documents must use the Times-like serif text font provided automatically by the aaai2027 style file. You may not use Computer Modern or Palatino for the text of your paper, and you must not load `times` or any other text-font package in your preamble—the style file manages the text font automatically.
- Your source must not require use of fonts for non-Roman alphabets within the text itself. If your paper includes symbols in other languages (such as, but not limited to, Arabic, Chinese, Hebrew, Japanese, Thai, Russian and other Cyrillic languages), you must restrict their use to bit-mapped figures. Fonts that require non-English language support (CID and Identity-H) must be converted to outlines or removed from the document (even if they are in a graphics file embedded in the document).
- Two-column format in AAAI style is required for all papers.
- The paper size for final submission must be US letter without exception.
- The source file must exactly match the PDF.
- The document margins may not be exceeded (no content should overflow into the margins or gutter).
- The number of pages and the file size must be as specified for your event.
- No document may be password protected.
- Neither the PDFs nor the source may contain any embedded links or bookmarks (no hyperref or navigator packages).
- Your source and PDF must not have any page numbers, footers, or headers (no pagestyle commands).
- Your PDF must conform to PDF version 1.5 or higher.
- Your LaTeX sources archive must not contain unnecessary files (figures, extra .tex files, etc.).
- Your graphics must be sized appropriately outside of LaTeX (do not use the “clip" or “trim” command) .

If you do not follow these requirements, your paper will be returned to you to correct the deficiencies.

What Files to Submit

You must submit the following items to ensure that your paper is published:

- A fully-compliant PDF file.
- Your LaTeX source file submitted as a **single** .tex file (do not use the “input" command to include sections of your paper — every section must be in the single source file). (The only allowable exception is .bib file, which should be included separately).
- The bibliography (.bib) file(s).
- Your source must compile on our system, which includes only standard LaTeX 2020 TeXLive support files.
- Only the graphics files used in compiling paper.
- The LaTeX-generated files (e.g. .aux, .bbl file, PDF, etc.).

Your LaTeX source will be reviewed and recompiled on our system (if it does not compile, your paper will be returned to you). **Do not submit your source in multiple text files.** Your single LaTeX source file must include all your text, your bibliography (formatted using aaai2027.bst), and any custom macros.

Your files should work without any supporting files (other than the program itself) on any computer with a standard LaTeX distribution.

Do not send files that are not actually used in the paper. Avoid including any files not needed for compiling your paper, including, for example, this instructions file, unused

graphics files, style files, additional material sent for the purpose of the paper review, intermediate build files and so forth.

Obsolete style files. The commands for some common packages (such as some used for algorithms), may have changed. Please be certain that you are not compiling your paper using old or obsolete style files.

Final Archive. Place your source files in a single archive which should be compressed using .zip. The final file size may not exceed 10 MB. Name your source file with the last (family) name of the first author, even if that is not you.

Using LaTeX to Format Your Paper

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.

Document Preamble

In the LaTeX source for your paper, you **must** place the following lines as shown in the example in this subsection. 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 correctly. The aaai2027 style file automatically loads all required text fonts (`newtxtext` for serif, `helvet` for sans-serif, `courier` for monospaced); do not add \usepackage{times}, \usepackage{helvet}, \usepackage{courier}, or any other font package, as doing so will conflict with the style.

Leave the setcounter for section number depth commented out and set at 0 unless you want to add section numbers to your paper. If you do add section numbers, you must uncomment this line and change the number to 1 (for section numbers), or 2 (for section and subsection numbers). The style file will not work properly with numbering of subsubsections, so do not use a number higher than 2.

The Following Must Appear in Your Preamble

```
\documentclass[letterpaper]{article}
% DO NOT CHANGE THIS
\usepackage{aaai2027} % DO NOT CHANGE THIS
\usepackage[hyphens]{url} % DO NOT CHANGE THIS
\usepackage{graphicx} % DO NOT CHANGE THIS
\urlstyle{rm} % DO NOT CHANGE THIS
\def\UrlFont{\rm} % DO NOT CHANGE THIS
\usepackage{natbib}  % DO NOT CHANGE THIS
\usepackage{caption}  % DO NOT CHANGE THIS
\frenchspacing % DO NOT CHANGE THIS
%
% Keep the \pdfinfo as shown here. There's no need
% for you to add the /Title and /Author tags.
\pdfinfo{
/TemplateVersion (2027.2)
}
```

Preparing Your Paper

After the preamble above, you should prepare your paper as follows:

```
\begin{document}
\maketitle
\begin{abstract}
%...
\end{abstract}
```

If you want to add links to the paper's code, dataset(s), and extended version or similar this is the place to add them, within a *links* environment:

```
\begin{links}
  \link{Code}{https://aaai.org/example/guidelines}
  \link{Datasets}{https://aaai.org/example/datasets}
  \link{Extended version}{https://aaai.org/example}
\end{links}
```

Make sure that you do not de-anonymize yourself with these links if you are preparing an anonymous submission.
You should then continue with the body of your paper. Your paper must conclude with the references, which should be inserted as follows:

```
% References and End of Paper
% These lines must be placed at the end of your paper
\bibliography{Bibliography-File}
\end{document}
```

Commands and Packages That May Not Be Used

There are a number of packages, commands, scripts, and macros that are incompatible with aaai2027.sty. The common ones are listed in tables 1 and 2. Generally, if a command, package, script, or macro alters float spacings, margins, fonts, sizing, linespacing, or the presentation of the references and citations, it is unacceptable. Note that negative vskip and vspace may not be used except in certain rare occurrences, and may never be used around tables, figures, captions, sections, subsections, subsubsections, or references.

Page Breaks

For your final camera ready copy, you must not use any page break commands. References must flow directly after the text without breaks. Note that some conferences require references to be on a separate page during the review process. AAAI Press, however, does not require this condition for the final paper.

Paper Size, Margins, and Column Width

Papers must be formatted to print in two-column format on 8.5 x 11 inch US letter-sized paper. The margins must be exactly as follows:

- Top margin: 1.25 inches (first page), .75 inches (others)
- Left margin: .75 inches
- Right margin: .75 inches
- Bottom margin: 1.25 inches

The default paper size in most installations of LaTeX is A4. However, because we require that your electronic paper be formatted in US letter size, the aaai2027.sty style file enforces US letter page size automatically. Please note that using any other package to alter page size (such as, but not limited to the Geometry package) will result in your final paper being returned to you for correction.

\abovecaption	\abovedisplay	\addevensidemargin	\addsidemargin
\addtolength	\baselinestretch	\belowcaption	\belowdisplay
\break	\clearpage	\clip	\columnsep
\float	\linespread	\newpage	\pagebreak
\setlength	\textheight	\tiny	\topmargin
\trim	\vskip{-	\vspace{-	

Table 1: Commands that must not be used

authblk	babel	balance	cjk
epsf	epsfig	euler	float
fullpage	geometry	graphics	hyperref
layout	lmodern	navigator	pdfcomment
pgfplots	psfig	pstricks	t1enc
times	titlesec	tocbibind	ulem

Table 2: LaTeX style packages that must not be used.

Column Width and Margins. To ensure maximum readability, your paper must include two columns. Each column should be 3.3 inches wide (slightly more than 3.25 inches), with a .375 inch (.952 cm) gutter of white space between the two columns. The aaai2027.sty file will automatically create these columns for you.

Overlength Papers

If your paper is too long and you resort to formatting tricks to make it fit, it is quite likely that it will be returned to you. The best way to retain readability if the paper is overlength is to cut text, figures, or tables. There are a few acceptable ways to reduce paper size that don't affect readability. First, turn on \frenchspacing, which will reduce the space after periods. Next, move all your figures and tables to the top of the page. Consider removing less important portions of a figure. If you use \centering instead of \begin{center} in your figure environment, you can also buy some space. For mathematical environments, you may reduce fontsize **but not below 6.5 point**.

Commands that alter page layout are forbidden. These include \columnsep, \float, \topmargin, \topskip, \textheight, \textwidth, \oddsidemargin, and \evensizemargin (this list is not exhaustive). If you alter page layout, you will be required to pay the page fee. Other commands that are questionable and may cause your paper to be rejected include \parindent, and \parskip. Commands that alter the space between sections are forbidden. The title sec package is not allowed. Regardless of the above, if your paper is obviously "squeezed" it is not going to to be accepted. Options for reducing the length of a paper include reducing the size of your graphics, cutting text, or paying the extra page charge (if it is offered).

Type Font and Size

Your paper must be formatted using the Times-like serif text font provided automatically by the aaai2027 style file (`newtxtext`). We will not accept papers formatted using Computer Modern or Palatino or some other text typeface. Do not load `times`, `helvet`, `courier`, or any other font package in your preamble; the style file loads all three automatically. Sans-serif text, when used, is Helvetica (`helvet`); monospaced text is Courier (`courier`). Use Symbol, Lucida, or Computer Modern for *mathematics only.*

Do not use type 3 fonts for any portion of your paper, including graphics. Type 3 bitmapped fonts are designed for fixed resolution printers. Most print at 300 dpi even if the printer resolution is 1200 dpi or higher. They also often cause high resolution imagesetter devices to crash. Consequently, AAAI will not accept electronic files containing obsolete type 3 fonts. Files containing those fonts (even in graphics) will be rejected. (Authors using blackboard symbols must avoid packages that use type 3 fonts.)

Fortunately, the aaai2027 style file — which loads `newtxtext`, `helvet`, and `courier` — embeds Type 1 outlines automatically under PDFLaTeX. Computer Modern used for mathematics is also fine: current TeX Live and MiKTeX distributions include cm-super and Latin Modern Type 1 fonts by default, so no manual font installation is required.

If you are unsure whether your paper contains Type 3 fonts, open the PDF in a viewer such as Adobe Acrobat Reader and inspect the font list (File $>$ Properties $>$ Fonts). Each embedded font should be listed as "Type 1," "TrueType," or "OpenType" — not "Type 3." The same inspection applies to embedded figures: export them from your illustration tool as PDF or high-resolution PNG/JPEG rather than EPS or PostScript.

The default size for your type must be ten-point with twelve-point leading (line spacing). Start all pages (except the first) directly under the top margin. (See the next section for instructions on formatting the title page.) Indent ten points when beginning a new paragraph, unless the paragraph begins directly below a heading or subheading.

Nonroman Fonts. If your paper includes symbols in other languages (such as, but not limited to, Arabic, Chinese, Hebrew, Japanese, Thai, Russian and other Cyrillic languages), you must restrict their use to bit-mapped figures.

Title and Authors

Your title must appear centered over both text columns in sixteen-point bold type (twenty-four point leading). The title must be written in Title Case according to the Chicago Manual of Style rules. The rules are a bit involved, but in general verbs (including short verbs like be, is, using, and go), nouns, adverbs, adjectives, and pronouns should be capitalized, (including both words in hyphenated terms), while articles, conjunctions, and prepositions are lower case unless

they directly follow a colon or long dash. You can use the online tool https://titlecaseconverter.com/ to double-check the proper capitalization (select the "Chicago" style and mark the "Show explanations" checkbox).

Author's names should appear below the title of the paper, centered in twelve-point type (with fifteen point leading), along with affiliation(s) and complete address(es) (including electronic mail address if available) in nine-point roman type (the twelve point leading). You should begin the two-column format when you come to the abstract.

Formatting Author Information. Author information has to be set according to the following specification depending if you have one or more than one affiliation. You may not use a table nor may you employ the `authorblk.sty` package. For one or several authors from the same institution, please separate them with commas and write all affiliation directly below (one affiliation per line) using the macros \author and \affiliations:

```
\author{
    Author 1, ..., Author n\\
}
\affiliations {
    Address line\\
    ... \\
    Address line\\
}
```

For authors from multiple institutions, use \textsuperscript {\rm x} to link authors to their affiliations. Ensure there are no spaces between the author name and the superscript. The comma should be placed after the superscript.

```
\author{
    AuthorOne\equalcontrib\textsuperscript{\rm 1,\rm 2},
    AuthorTwo\equalcontrib\textsuperscript{\rm 2},
    AuthorThree\textsuperscript{\rm 3},\\
    AuthorFour\textsuperscript{\rm 4},\\
    AuthorFive\textsuperscript{\rm 5}
}
\affiliations {
    \textsuperscript{\rm 1}AffiliationOne,\\
    \textsuperscript{\rm 2}AffiliationTwo,\\
    \textsuperscript{\rm 3}AffiliationThree,\\
    \textsuperscript{\rm 4}AffiliationFour,\\
    \textsuperscript{\rm 5}AffiliationFive\\
    \{email, email\}@affiliation.com,
    email@affiliation.com,
    email@affiliation.com,
    email@affiliation.com
}
```

You can indicate that some authors contributed equally using the \equalcontrib command. This will add a marker after the author names and a footnote on the first page.

Similarly, you can mark author(s) as corresponding author(s) with the \corresponding command within the \author environment.

Note that you may want to break the author list for better visualization. You can achieve this using a simple line break (\\).

LaTeX Copyright Notice

If you use aaai2027.sty in camera-ready mode the copyright notice is inserted automatically and may not be disabled. In submission mode the copyright disclaimer is automatically suppressed.

Credits

Any credits to a sponsoring agency should appear in the acknowledgments section, unless the agency requires different placement. If it is necessary to include this information on the front page, use \thanks in either the \author or \title commands. For example:

```
\title{Very Important Results in AI\thanks{This work is supported by everybody.}}
```

Multiple \thanks commands can be given. Each will result in a separate footnote indication in the author or title with the corresponding text at the bottom of the first column of the document. Note that the \thanks command is fragile. You will need to use \protect.

Please do not include \pubnote commands in your document.

Abstract

Follow the example commands in this document for creation of your abstract. The command \begin{abstract} will automatically indent the text block. Please do not indent it further. Do not include references in your abstract!

Page Numbers

Do not print any page numbers on your paper. The use of \pagestyle is forbidden.

Text

The main body of the paper must be formatted in black, ten-point Times Roman with twelve-point leading (line spacing). You may not reduce font size or the linespacing. Commands that alter font size or line spacing (including, but not limited to baselinestretch, baselineshift, linespread, and others) are expressly forbidden. In addition, you may not use color in the text.

Citations

Citations within the text should include the author's last name and year, for example (Newell 1980). Append lower-case letters to the year in cases of ambiguity. Multiple authors should be treated as follows: (Feigenbaum and Engelmore 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.

Footnotes

Use footnotes judiciously, taking into account that they interrupt the reading of the text. When required, 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.

Headings and Sections

When necessary, headings should be used to separate major sections of your paper. Remember, you are writing a short paper, not a lengthy book! An overabundance of headings will tend to make your paper look more like an outline than a paper. The aaai2027.sty package will create headings for you. Do not alter their size nor their spacing above or below.

Section Numbers. The use of section numbers in AAAI Press papers is optional. To use section numbers in LaTeX, uncomment the setcounter line in your document preamble and change the 0 to a 1. Section numbers should not be used in short poster papers and/or extended abstracts.

Section Headings. Sections must appear in the following order:

1. Main content sections
2. Content Appendices (optional). These appendices are considered part of the main paper, count towards page limits and and are subject to the same formatting and review requirements.
3. Ethical Statement (optional, unnumbered)
4. Acknowledgments (optional, unnumbered)
5. References (unnumbered)
6. Supplementary Material / Technical Appendices (only if permitted by the conference). Policies regarding supplementary material vary across conferences: some require technical appendices to be submitted as separate documents, some permit them at submission time but do not publish them in the proceedings, and others do not allow them at all. Consult the conference website for the applicable instructions.

Content Appendices. Content appendices must appear after the main content. If your main sections are numbered, appendix sections must use letters instead of arabic numerals. In LaTeX you can use the `\appendix` command to achieve this effect and then use `\section{Heading}` normally for your appendix sections.

Ethical Statement. You can write a statement about the potential ethical impact of your work, including its broad societal implications, both positive and negative. If included, such statement must be written in an unnumbered section titled *Ethical Statement*.

Acknowledgments. The acknowledgments section, if included, appears right before the references and is headed "Acknowledgments". It must not be numbered even if other sections are (use `\section*{Acknowledgments}` in LaTeX). 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.

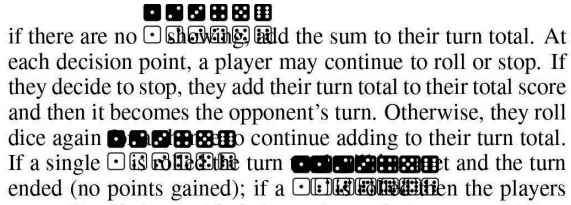

if there are no [illegible] showing, add the sum to their turn total. At each decision point, a player may continue to roll or stop. If they decide to stop, they add their turn total to their total score and then it becomes the opponent's turn. Otherwise, they roll dice again [illegible] to continue adding to their turn total. If a single [illegible] is rolled, the turn [illegible] and the turn ended (no points gained); if a [illegible] then 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.

References. The references section should be labeled "References" and must 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

Your paper must compile in PDFLaTeX. 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.

Figures, drawings, tables, and photographs should be placed throughout the paper on the page (or the subsequent page) where they are first discussed. Do not group them together at the end of the paper. If placed at the top 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. Do not use minipage to group figures.

If you normally create your figures using pgfplots, note that pgfplots itself must not be used in your paper source (see Table 2). Pre-generate your figures externally, export them as PDF files, and import them with \includegraphics. Bounding and trim boxes created by pgfplots are fragile and tend to create issues.

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, so **this is forbidden**. The full image can reappear (and obscure whatever it is overlapping) when page numbers are applied or color space is

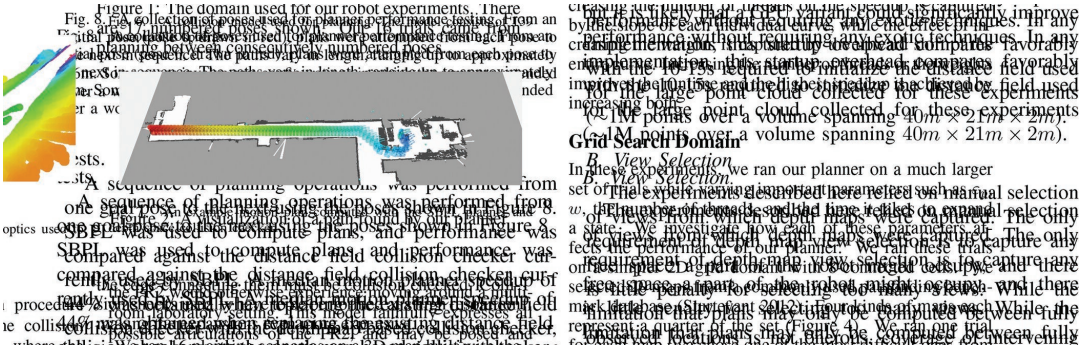


Figure 2: Adjusting the bounding box instead of actually removing the unwanted data resulted multiple layers in this paper. It also needlessly increased the PDF size. In this case, the size of the unwanted layer doubled the paper's size, and produced the following surprising results in final production. Crop your figures properly in a graphics program. Don't just alter the bounding box.

standardized. Figures 1, and 2 display some unwanted results that often occur.

All figures must be in .jpg, .png, or .pdf format before submission. Pre-convert any EPS or PostScript illustrations using tools such as `epstopdf` (for EPS to PDF) or `ps2pdf` (for PostScript to PDF) outside of LaTeX, and verify the resulting PDF for correct bounding boxes.

Figure Captions. The illustration number and caption must appear *under* the illustration. Labels and other text with the actual illustration must be at least nine-point type. However, the font and size of figure captions must be 10 point roman. Do not make them smaller, bold, or italic. (Individual words may be italicized if the context requires differentiation.)

Tables

Tables should be presented in 10 point roman type. If necessary, they may be altered to 9 point type. You must not use `\resizebox` or other commands that resize the entire table to make it smaller, because you can't control the final font size this way. If your table is too large you can use `\setlength{\tabcolsep}{1mm}` to compress the columns a bit or you can adapt the content (e.g.: reduce the decimal precision when presenting numbers, use shortened column titles, make some column double-line to get it narrower). (Note: `\setlength{\tabcolsep}` is a permitted exception to the general `\setlength` ban in Table 1.)

Tables that do not fit in a single column must be placed across double columns. If your table won't fit within the margins even when spanning both columns and using the above techniques, you must split it in two separate tables.

Table Captions. The number and caption for your table must appear *under* (not above) the table. Additionally, the font and size of table captions must be 10 point roman and must be placed beneath the figure. Do not make them smaller, bold, or italic. (Individual words may be italicized if the context requires differentiation.)

Low-Resolution Bitmaps. You may not use low-resolution (such as 72 dpi) screen-dumps and GIF files—these files contain so few pixels that they are always blurry, and illegible when printed. If they are color, they will become an indecipherable mess when converted to black and white. This is always the case with gif files, which should never be used. The resolution of screen dumps can be increased by reducing the print size of the original file while retaining the same number of pixels. You can also enlarge files by manipulating them in software such as PhotoShop. Your figures should be 300 dpi when incorporated into your document.

LaTeX Overflow. LaTeX users please beware: LaTeX will sometimes put portions of the figure or table or an equation in the margin. If this happens, you need to make the figure or table span both columns. If absolutely necessary, you may reduce the figure, or reformat the equation, or reconfigure the table. **Check your log file!** You must fix any overflow into the margin (that means no overfull boxes in LaTeX). **Nothing is permitted to intrude into the margin or gutter.**

Using Color. Use of color should be limited to figures and minor text details (it is ok to colorize one word, but not an entire sentence). It must be WCAG 2.0 compliant. (That is, the contrast ratio must be greater than 4.5:1 no matter the font size.) It may never be used for any portion of the text of your paper. The archival version of your paper may be printed in grayscale. The web version should 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 test the figures in your document when converted to grayscale. Also, you should be mindful of readers who may happen to have trouble distinguishing colors. Hence, 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

Algorithm 1: Example algorithm

Input: Your algorithm's input
Parameter: Optional list of parameters
Output: Your algorithm's output

Let $t = 0$.
while condition **do**
    Do some action.
    if conditional **then**
        Perform task A.
    else
        Perform task B.
    end if
end while
return solution

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.

Algorithms. Algorithms and/or programs are a special kind of figures. Like all illustrations, they should appear floated to the top (preferably) or bottom of the page. However, their caption should appear in the header, left-justified and enclosed between horizontal lines, as shown in Algorithm 1. The algorithm body should be terminated with another horizontal line. It is up to the authors to decide whether to show line numbers or not, how to format comments, etc.

In LaTeX algorithms may be typeset using the `algorithm` and `algorithmic` packages, but you can also use one of the many other packages for the task.

Listings. Listings are much like algorithms and programs. They should also appear floated to the top (preferably) or bottom of the page. Listing captions should appear in the header, left-justified and enclosed between horizontal lines as shown in Listing 1. Terminate the body with another horizontal line and avoid any background color. Line numbers, if included, must appear within the text column.

Listing 1: Example listing `quicksort.hs`

```
quicksort :: Ord a => [a] -> [a]
quicksort []     = []
quicksort (p:xs) = (quicksort lesser) ++
      [p] ++ (quicksort greater)
  where
    lesser  = filter (< p) xs
    greater = filter (>= p) xs
```

References

The AAAI style includes a set of definitions for use in formatting references with BibTeX. These definitions make the bibliography style fairly close to the ones specified in the Reference Examples appendix below. To use these definitions, you also need the BibTeX style file "aaai2027.bst," available in the AAAI Author Kit on the AAAI web site. Then, at the end of your paper but before \enddocument, you need to put the following lines:

\bibliography{bibfile1,bibfile2,...}

Please note that the aaai2027.sty class already sets the bibliographystyle for you, so you do not have to place any \bibliographystyle command in the document yourselves. The aaai2027.sty file is incompatible with the hyperref and navigator packages. If you use either, your references will be garbled and your paper will be returned to you.

References may be the same size as surrounding text. However, in this section (only), you may reduce the size to *small* (9pt) if your paper exceeds the allowable number of pages. Making it any smaller than 9 point with 10 point linespacing, however, is not allowed.

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.

You may also use any of the *natbib* citation commands.

Proofreading Your PDF

Please check all the pages of your PDF file. The most commonly forgotten element is the acknowledgments — especially the correct grant number. Authors also commonly forget to add the metadata to the source, use the wrong reference style file, or don't follow the capitalization rules or comma placement for their author-title information properly. A final common problem is text (especially equations) that runs into the margin. You will need to fix these common errors before submitting your file.

Improperly Formatted Files

In the past, AAAI has corrected improperly formatted files submitted by the authors. Unfortunately, this has become

an increasingly burdensome expense that we can no longer absorb). Consequently, if your file is improperly formatted, it will be returned to you for correction.

Naming Your Electronic File

We require that you name your LaTeX source file with the last name (family name) of the first author so that it can easily be differentiated from other submissions. Complete file-naming instructions will be provided to you in the submission instructions.

Submitting Your Electronic Files to AAAI

Instructions on paper submittal will be provided to you in your acceptance letter.

Inquiries

If you have any questions about the preparation or submission of your paper as instructed in this document, please contact AAAI Press at the address given below. If you have technical questions about implementation of the aaai style file, please contact an expert at your site. We do not provide technical support for LaTeX or any other software package. To avoid problems, please keep your paper simple, and do not incorporate complicated macros and style files.

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Additional Resources

LaTeX is a difficult program to master. If you encounter issues producing correct PDF output, please consult your TeX distribution documentation (TeX Live or MiKTeX) and ensure you are using an up-to-date PDFLaTeX workflow. Most compilation and font issues can be resolved by updating your distribution and avoiding deprecated packages.

Reference Examples

Formatted bibliographies should look like the following examples. You should use BibTeX to generate the references. Missing fields are unacceptable when compiling references, and usually indicate that you are using the wrong type of entry (BibTeX class).

Book with multiple authors Use the `@book` class.

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

Journal and magazine articles Use the `@article` class.

Robinson, A. L. 1980. New Ways to Make Microcircuits Smaller. *Science*, 208(4447): 1019–1022.

Hasling, D. W.; Clancey, W. J.; and Rennels, G. 1984. Strategic explanations for a diagnostic consultation system. *International Journal of Man-Machine Studies*, 20(1): 3–19.

Proceedings paper published by a society, press or publisher Use the `@inproceedings` class. You may abbreviate the *booktitle* field, but make sure that the conference edition is clear.

Clancey, W. J. 1984. Classification Problem Solving. In *Proceedings of the Fourth National Conference on Artificial Intelligence*, 45–54. Menlo Park, Calif.: AAAI Press.

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 (IJCAI-83)*, 556–560. Menlo Park, Calif: IJCAI Organization.

University technical report Use the `@techreport` class.

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

Dissertation or thesis Use the `@phdthesis` class.

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 Use the `@misc` class with a `note="Forthcoming"` annotation.

```
@misc(key,
  [...]
  note="Forthcoming",
)
```

Clancey, W. J. 2021. The Engineering of Qualitative Models. Forthcoming.

ArXiv paper Fetch the BibTeX entry from the "Export Bibtex Citation" link in the arXiv website. Notice it uses the `@misc` class instead of the `@article` one, and that it includes the `eprint` and `archivePrefix` keys.

```
@misc(key,
  [...]
  eprint="xxxx.yyyy",
  archivePrefix="arXiv",
)
```

Vaswani, A.; Shazeer, N.; Parmar, N.; Uszkoreit, J.; Jones, L.; Gomez, A. N.; Kaiser, L.; and Polosukhin, I. 2023. Attention Is All You Need. arXiv:1706.03762.

Website or online resource Use the `@misc` class. Add the url in the `howpublished` field and the date of access in the `note` field:

```
@misc(key,
  [...]
  howpublished="\url{http://...}",
  note="Accessed: YYYY-mm-dd",
)
```

NASA. 2015. Pluto: The 'Other' Red Planet. https://www.nasa.gov/nh/pluto-the-other-red-planet. Accessed: 2018-12-06.

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Thank you for reading these instructions carefully. We look forward to receiving your electronic files!

References

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

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 (IJCAI-83)*, 556–560. Menlo Park, Calif: IJCAI Organization.

Clancey, W. J. 1984. Classification Problem Solving. In *Proceedings of the Fourth National Conference on Artificial Intelligence*, 45–54. Menlo Park, Calif.: AAAI Press.

Clancey, W. J. 2021. The Engineering of Qualitative Models. Forthcoming.

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

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Vaswani, A.; Shazeer, N.; Parmar, N.; Uszkoreit, J.; Jones, L.; Gomez, A. N.; Kaiser, L.; and Polosukhin, I. 2023. Attention Is All You Need. arXiv:1706.03762.