

2017 Formatting Instructions for Authors Using L^AT_EX

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Abstract

The Proposed H Distance

We consider the one dimensional case as a start. Following is the optimal H distance proposed in place of Wasserstein distance,

$$H^*(x, \mathbb{P}_r, \mathbb{P}_g) = \left| \int_x^1 \mathbb{P}_r(x') dx' - \int_x^1 \mathbb{P}_g(x') dx' \right| \quad (1)$$

while the Wasserstein distance is,

$$H^*(x, \mathbb{P}_r, \mathbb{P}_g) = \left| \int_x^1 \mathbb{P}_r(x') dx' - \int_x^1 \mathbb{P}_g(x') dx' \right| \quad (2)$$

where x_r are real samples sampled from distribution \mathbb{P}_r , and x_g are generated samples sampled from distribution \mathbb{P}_g ,

$$x_r \sim \mathbb{P}_r \quad (3)$$

$$x_g \sim \mathbb{P}_g \quad (4)$$

Note that both x_r and x_g are normalized between $[0, 1]$, so that the integral operation in (2) can be conducted in $[0, 1]$, instead of $[-\infty, +\infty]$. This distance is modeled for every x , which means we train the generative model g to minimize H^* at every x_g ,

$$\min_g \mathbb{E}_{x_g \sim \mathbb{P}_g} [H^*(x_g, \mathbb{P}_r, \mathbb{P}_g)] \quad (5)$$

To give insight on why it is better This distance is better than Wasserstein distance in the sense that it computes the unbalance of the whole distribution at every point.

Assuming we have a optimal D model that can model the part in the

Following Chris's second equation,

$$\mathbb{E}[f(X_r)] - \mathbb{E}[f(X_g)] = \sum_{n=1}^{\infty} \frac{a_n}{n!} (\mathbb{E}[X_r^n] - \mathbb{E}[X_g^n]) \quad (6)$$

The coefficient in above equation, i.e., a_0, a_1, \dots, a_n is variables to be learnt, which means it is modeled by a neural

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network D with parameter vector θ_n and input of X_r or X_g , and it is different for X_r and X_g ,

$$a_n = D_{\theta_n}(X_r) \quad (7)$$

$$b_n = D_{\theta_n}(X_g) \quad (8)$$

As we discussed, $\theta_0, \theta_1, \dots, \theta_n$ may share most of the parameters. So Chris (6) should be,

$$\mathbb{E}[f(X_r)] - \mathbb{E}[f(X_g)] = \sum_{n=1}^{\infty} (\mathbb{E}[\frac{a_n}{n!} X_r^n] - \mathbb{E}[\frac{b_n}{n!} X_g^n]) \quad (9)$$

or to be more specific,

$$\begin{aligned} \mathbb{E}[f(X_r)] - \mathbb{E}[f(X_g)] = \\ \sum_{n=1}^{\infty} (\mathbb{E}[\frac{D_{\theta_n}(X_r)}{n!} X_r^n] - \mathbb{E}[\frac{D_{\theta_n}(X_g)}{n!} X_g^n]) \end{aligned} \quad (10)$$

I do not know how to continue to prove it is

Consider,

$$x_r \sim \mathbb{P}_r \quad (11)$$

$$x_g \sim \mathbb{P}_g \quad (12)$$

$$u \sim U[0, 1] \quad (13)$$

$$x_u = ux_u + (1 - u)x_g \quad (14)$$

where $U[0, 1]$ is uniform distribution between 0 and 1. Assuming x_u follows a distribution given by \mathbb{P}_u ,

$$x_u \sim \mathbb{P}_u \quad (15)$$

Apparently, \mathbb{P}_u can be represented by \mathbb{P}_r and \mathbb{P}_g , but in a tricky way.

I think the distance we are trying to minimize for the new loss is,

$$H^*(\mathbb{P}_r, \mathbb{P}_g) = \int_{\mathcal{X}} \left\{ \left| \int_x^{\mathcal{X}} \mathbb{P}_r(x') dx' - \int_x^{\mathcal{X}} \mathbb{P}_g(x') dx' \right| \right\} dx \quad (16)$$

Since we update the model on position x_u , we actually can only achieve,

$$H(\mathbb{P}_r, \mathbb{P}_g) = \mathbb{E}_{x_u \sim \mathbb{P}_u} \left\{ \int_{x_u}^{\mathcal{X}} \mathbb{P}_r(x) dx - \int_{x_u}^{\mathcal{X}} \mathbb{P}_g(x) dx \right\} \quad (17)$$

and x_g is sampled from \mathbb{P}_g ,

$$x_g \sim \mathbb{P}_g \quad (18)$$

which is produced by a generative model G^β , with parameter vector β to be optimized. For every x_r, x_g pair, we sample x_ϵ between x_r and x_g ,

$$x_\epsilon = \epsilon x_r + (1 - \epsilon)x_g \quad (19)$$

where

$$\epsilon \sim \text{Uniform}[0, 1] \quad (20)$$

Assuming x_ϵ follows a distribution given by \mathbb{P}_ϵ ,

$$x_\epsilon \sim \mathbb{P}_\epsilon \quad (21)$$

Apparently, \mathbb{P}_ϵ can be represented by \mathbb{P}_r and \mathbb{P}_g , but in a tricky way.

Then we build a model D^θ with parameter vector θ . For every set of $\{x_r, x_g, x_\epsilon\}$, the update rule of θ is,

$$\theta \longrightarrow \theta + \nabla_\theta \|\nabla_{x_\epsilon} D^\theta(x_\epsilon) - \frac{x_r - x_g}{\|x_r - x_g\|}\|^2 \quad (22)$$

which means the optimal D^θ has the following attribute,

$$\nabla_x D^{\theta^*}(x) = \mathbb{E}_{x_r \sim \mathbb{P}_r, x_g \sim \mathbb{P}_g} \left\{ \frac{x_r - x_g}{\|x_r - x_g\|} \right\} \quad (23)$$

Under this D^{θ^*} , the update rule of G^β is

$$\min_{\phi} \mathbb{E}_{(P_g, P_r, U)} [\|\nabla_{\tilde{x}} f_\phi(x_{\tilde{x}}) - \frac{x_r - x_g}{\|x_r - x_g\|}\|^2] \quad (24)$$

$$\max_g \mathbb{E}_{(P_g, P_r, U)} [f_\phi(x_g)] \quad (25)$$

the same as,

$$\min_{\phi} \mathbb{E}_{(P_g, P_r, U)} [\|\nabla_{\tilde{x}} f_\phi(x_{\tilde{x}}) - \frac{x_g - x_r}{\|x_g - x_r\|}\|^2] \quad (26)$$

$$\min_g \mathbb{E}_{(P_g, P_r, U)} [f_\phi(x_g)] \quad (27)$$

I believe the distance we are minimizing for the new loss is,

where x_ϵ is a random variable computed by,

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- You may not alter the font sizes of text elements, footnotes, heading elements, captions, or title information (for references and tables and mathematics, please see the limited exceptions provided herein).
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- Your title must follow Title Case capitalization rules (not sentence case).
- Your .tex file include completed metadata to pass-through to the PDF (see PDFINFO below)
- \LaTeX documents must use the Times or Nimbus font package (do not use Computer Modern for the text of your paper).
- No \LaTeX 209 documents may be used or submitted.
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- 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 must be as specified in the formatting instructions.
- 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.
- Your source and PDF must not have any page numbers, footers, or headers.
- Your PDF must be compatible with Acrobat 5 or higher.
- Your L^AT_EX source file (excluding references) must consist of a **single** file (use of the “input” command is not allowed).
- Your graphics must be sized appropriately outside of L^AT_EX (do not use the “clip” command) .

If you do not follow the above requirements, it is likely that we will be unable to publish your paper.

What Files to Submit

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

- A fully-compliant PDF file.
- Your L^AT_EX 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 exception is the reference list, which you should include separately. Your source must compile on our system, which includes the standard L^AT_EX support files.
- Only the graphics files used in compiling paper.
- The L^AT_EX-generated files (e.g. .aux and .bib file, etc.) for your compiled source.
- If you have used an old installation of L^AT_EX, you should include algorithm style files). If in doubt, include it.

Your L^AT_EX source will be reviewed and recompiled on our system (if it does not compile, you may incur late fees). **Do not submit your source in multiple text files.** Your single L^AT_EX source file must include all your text, your bibliography (formatted using aaai.bst), and any custom macros. Accompanying this source file, you must also supply any nonstandard (or older) referenced style files and all your referenced graphics files.

Your files should work without any supporting files (other than the program itself) on any computer with a standard L^AT_EX distribution. Place your PDF and source files in a single tar, zipped, gzipped, stuffed, or compressed archive. Name your source file with your last (family) name.

Do not send files that are not actually used in the paper. We don’t want you to send us any files not needed for compiling your paper, including, for example, this instructions file, unused graphics files, standard style files, and so forth.

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Using L^AT_EX 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 T_EX

search path. Placing it in the same directory as the paper should also work. You must download the latest version of the complete author kit so that you will have the latest instruction set and style file.

Document Preamble

In the L^AT_EX 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).

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.

If (and only if) your author title information will not fit within the specified height allowed, put \setlength\titlebox2.5in in your preamble. Increase the height until the height error disappears from your log. You may not use the \setlength command elsewhere in your paper, and it may not be used to reduce the height of the author-title box.

The Following Must Appear in Your Preamble

```
\documentclass[letterpaper]{article}
\usepackage{aaai}
\usepackage{times}
\usepackage{helvet}
\usepackage{courier}
\usepackage{url}
\usepackage{graphicx}
\frenchspacing
% Add additional packages here. The following
% packages may NOT be used (this list
% is not exhaustive:
% authblk, caption, CJK, float, fullpage, geometry,
% hyperref, layout, nameref, natbib, savetrees,
% setspace, titlesec, tocbibind, ulem
%
%US Lettersize Paper Is Required
\setlength{pdfpagewidth}{8.5in}
\setlength{pdfpageheight}{11in}\
%
%
% PDFINFO
% You are required to complete the following
% for pass-through to the PDF.
% No LaTeX commands of any kind may be
% entered. The parentheses and spaces
% are an integral part of the
% pdfinfo script and must not be removed.
%
\pdfinfo{
/Title (Input Your Paper Title Here)
/Author (John Doe, Jane Doe)
```

```

/Keywords (Input your keywords in this optional area)
}
%
%Section Numbers
% Uncomment if you want to use section numbers
% and change the 0 to a 1 or 2
% \setcounter{secnumdepth}{0}

% Title and Author Information Must Immediate Follow
% the pdfinfo within the preamble
%
\title{Title}\\
\author{\{Author 1 \ and Author 2\\
Address line\\
Address line\\
\ And\\
Author 3\\
Address line\\
Address line
}\\
%

```

Preparing Your Paper

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

```

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

```

The Following Must Conclude Your Document

```

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

```

Inserting Document Metadata with L^AT_EX

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```

\begin{document}
\maketitle
...
\bibliography{Bibliography-File}
\bibliographystyle{aaai}
\end{document}

```

Incompatible Packages

The following packages are incompatible with aaai.sty and/or aaai.bst and must not be used (this list is not exhaustive — there are others as well):

- authblk
- caption
- CJK
- float
- fullpage
- geometry
- hyperref
- layout
- nameref
- natbib
- savetrees
- setspace
- titlesec
- tocbibind
- ulem
- T1 fontenc package (install the CM super fonts package instead)

Illegal Commands

The following commands may not be used in your paper (this list is not exhaustive — there are others; generally, if it alters floats, margins, fonts, linespacing, or the presentation of the references and citations, it is unacceptable:

- \renewcommand (in almost all instances)
- baselinestretch
- \setlength (except for titlebox)
- \input
- \vspace or vskip (when used before or after a section or subsection)
- \addtolength
- \columnsep
- \top margin (or text height or addsidemargin or even side margin)
- trim or clip (used to crop figures)
- any command that globally alters floats, space above and below figures and tables

Illegal Commands in Final Paper

For your final camera ready copy, you must not use any page break commands, including, but not limited to:

- \newpage
- \break
- \clearpage
- \pagebreak

(References must flow directly after the text without breaks.) Note that this may *not* be the case when submitting a paper for review. 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: .75 inches
- 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, you will need to alter the default for this paper to US letter size. Assuming you are using the 2e version of \LaTeX , you can do this by including the [letterpaper] option at the beginning of your file: `\documentclass[letterpaper]article`.

This command is usually sufficient to change the format. Sometimes, however, it may not work. Use \PDFLaTeX and include `\setlength{\pdfpagewidth}{8.5in}` `\setlength{\pdfpageheight}{11in}` in your preamble.

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Overlength Papers

If your paper is too long, turn on `\frenchspacing`, which will reduce the space after periods. Next, shrink the size of your graphics. Use `\centering` instead of `\begin{center}` in your figure environment. For mathematical environments, you may reduce fontsize. You may also alter the size of your bibliography by inserting `\fontsize{9.5pt}{10.5pt}` `\selectfont` right before the bibliography (the minimum size is `\fontsize{9.0pt}{10.0pt}`).

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or cutting text instead or (if allowed) paying the extra page charge.

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.

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.

Type Font and Size

Your paper must be formatted in Times Roman or Nimbus. We will not accept papers formatted using Computer Modern or Palatino or some other font as the text or heading typeface. Sans serif, when used, should be Courier. Use Symbol or Lucida or Computer Modern for *mathematics only*.

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Fortunately, there are effective workarounds that will prevent your file from embedding type 3 bitmapped fonts. The easiest workaround is to use the required times, helvet, and courier packages with $\text{\LaTeX}2\epsilon$. (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 section “Obtaining Type 1 Computer Modern.”)

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The default size for your type should 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.

Obtaining Type 1 Computer Modern for \LaTeX . If you use Computer Modern for the mathematics in your paper (you cannot use it for the text) you may need to download type 1 Computer fonts. They are available without charge from the American Mathematical Society: <http://www.ams.org/tex/type1-fonts.html>.

Title and Authors

Your title must appear in mixed case (nouns, pronouns, and verbs are capitalized) near the top of the first page, centered over both columns in sixteen-point bold type (twenty-four point leading). This style is called “mixed case.” 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). (If the title is long, or you have many authors, you may reduce the specified point sizes by up to two points.) You should begin the two-column format when you come to the abstract.

Formatting Author Information Author information can be set in a number of different styles, depending on the number of authors and the number of affiliations you need to display. For several authors from the same institution, use `\and`:

```
\author{Author 1 \and ... \and Author n\\
Address line \\ ... \\ Address line}
```

If the names do not fit well on one line use:

```
\author{Author 1} ... \\
{\bf \Large Author ... Author}\\
Address line \\ ... \\ Address line
}
```

For authors from different institutions, use `\And`:

```
\author{Author 1\\ Address line \\ ... \\ Address line
\And ... \And Author n\\
Address line\\ ... \\ Address line}
```

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If the title and author information does not fit in the area allocated, place `\setlength\titlebox{height}` after the `\documentclass` line where `{height}` is 2.5in or greater.

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

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```

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Page Numbers

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Text

The main body of the paper must be formatted in ten-point with twelve-point leading (line spacing).

Citations

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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.

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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 `aaai.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 or 2. Section numbers should not be used in short poster papers.

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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.

Appendices. Any appendices follow the acknowledgments, if included, or after the main body of text if no acknowledgments appear.

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 \LaTeX (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.

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 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 \LaTeX). If you don’t, the overflow text will simply be eliminated. **Nothing is permitted to intrude into the margin or gutter.**

Using Color. Your paper will be printed in black and white and grayscale. 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. Of course, any reference to color will be indecipherable to your reader.

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 AAAI 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 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.

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.

Warning: The aaai.sty file is incompatible with the hyperref and natbib packages. If you use either, your references will be garbled and your paper will not be published.

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. 1983b. 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. Poligon: A System for Parallel Problem Solving, Technical Report, KSL-86-19, Dept. of Computer Science, Stanford Univ.

Dissertation or Thesis

Clancey, W. J. 1979b. 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. 1986a. The Engineering of Qualitative Models. *Forthcoming*.

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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 aaai.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 BibT_EX 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.

The preparation of the L^AT_EX and BibT_EX files that implement these instructions was supported by Schlumberger Palo Alto Research, AT&T Bell Laboratories, Morgan Kaufmann Publishers, The Live Oak Press, LLC, and AAAI Press. Bibliography style changes were added by Sunil Issar. \pubnote was added by J. Scott Penberthy. George Ferguson added support for printing the AAAI copyright slug. Additional changes to aaai.sty and aaai.bst have been made by the AAAI staff.

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