
Submission and Formatting Instructions for the Twenty-second International Conference on Machine Learning (ICML-2005)

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Abstract

ICML-2005 reviewing will be blind to the identities of the authors, and therefore identifying information should not appear in papers submitted for review.

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1. Electronic Submission

As in the past few years, ICML-2005 will rely heavily on electronic formats for submission and review. We assume that nearly all authors will have access to standard software for word processing, electronic mail, and ftp file transfer. Authors who do not have such access should send email with their concerns to info@icml2005.ais.fraunhofer.de.

1.1. Templates for Papers

Electronic templates for producing papers for submission are available for several major word processors, including L^AT_EX and Microsoft Word. Templates are accessible on the World Wide Web at:
<http://icml2005.ais.fraunhofer.de/papers/format>

Send questions about these electronic templates to info@icml2005.ais.fraunhofer.de.

1.2. Submitting Papers

Submission to ICML-2005 will be entirely electronic, via a web site (not email). The URL and information about the submission process will appear on the conference web site at:
<http://icml2005.ais.fraunhofer.de/papers/submit>

The papers are due on **Tuesday, March 8, 2005 (23:59:59 Central European Time)**. If your submission does not reach us by this date, it will not be considered for publication.

To facilitate blind review, no author information should appear on the paper. Section 2.3 will explain the details of how to format this.

To ensure our ability to print submissions, authors must provide their manuscripts in **postscript** or **pdf** format. If you are preparing your paper in Word, please use the Apple LaserWriter 16/600 PS driver to ensure its printability in other environments. Authors using **Word** must convert their document to postscript or pdf. Most of the latest versions of Word have the facility to do this automatically. Those who use **latex** to format their accepted papers need to pay close attention to the typefaces used. Specifically, when converting the dvi output of LaTeX to Postscript the default behavior is to use non-scalable Type 3 PostScript bitmap fonts to represent the standard LaTeX fonts. The resulting document is difficult to read in electronic form; the type appears fuzzy. To avoid this problem, dvips must be instructed to use an alternative font map. This can be achieved with the following command:

```
dvips -Ppdf -tletter -G0 -o paper.ps paper.dvi
```

Note that it is a zero following the "-G". This tells dvips to use the config.pdf file (and this file refers to a better font mapping). Another alternative is to use the **pdflatex** program instead of straight LaTeX. This program avoids the Type 3 font problem, however you must ensure that all of the fonts are embedded (use pdffonts). If they are not, you need to configure pdflatex to use a font map file that specifies that the fonts

be embedded. Also you should ensure that images are not downsampled or otherwise compressed in a lossy way. If you cannot deliver a postscript or pdf file electronically due to exceptional conditions, send email to info@icml2005.ais.fraunhofer.de to discuss alternative means of delivery.

ICML-2005 will not accept any paper which, at the time of submission, is under review or has already been accepted for publication in a journal or another conference. Authors are also expected not to submit their papers elsewhere during ICML's review period.

1.3. Reacting to Reviews

One novelty that ICML 2005 introduces is that authors will be given the option of providing a short reaction to the initial reviews. Reactions will have to be input in CyberChair between **18 and 25 April** by the authors. These reactions will be taken into account in the discussion among the reviewers and PC-members.

1.4. Submitting Final Camera-Ready Copy

Final versions of papers accepted for publication, and resubmissions of conditionally accepted papers, should follow the same format and naming convention as initial submissions, except of course that the normal author information (names and affiliations) should be given. See Section 2.3.1 for details of how to format this.

The footnote, "Preliminary work. Under review by the International Conference on Machine Learning (ICML). Do not distribute." must be modified to "Appearing in *Proceedings of the 22nd International Conference on Machine Learning*, Bonn, Germany, 2005. Copyright 2005 by the author(s)/owner(s)." For those using the LaTeX style file, simply change `\usepackage{icml2005}` to `\usepackage[accepted]{icml2005}`. Authors using Word, must edit the footnote on the first page of the document themselves.

Another novelty that ICML 2005 introduces is that camera-ready copies should have the title of the paper as running head on each page except the first one. The running title consists of a single line centered above a horizontal rule which is 1 point thick. The running head should be centered, bold and in 9 point type. The rule should be 10 points above the main text. For those using the LaTeX style file, the original title is automatically set as running head using the **fancyhdr** package which can be obtained at the ICML-2005 web site. In case that the original title exceeds the size

restrictions, a shorter form can be supplied by using

```
\icmltitlerunning{...}
```

just before `\begin{document}`. Authors using Word, must edit the header of the document themselves.

The deadline for final camera-ready copies of *accepted papers* is **Wednesday, June 1, 2005, (23:59:59 Central European Time)**. The deadline for final camera-ready copies of *conditionally accepted papers* is **Sunday, May 29, 2005 (23:59:59 Central European Time)**. Instructions for submitted revised final papers will appear on the website.

If your revised paper does not reach us by the corresponding date, it will not be included in the proceedings.

2. Format of the Paper

All submissions should follow the same format to ensure the printer can reproduce them without problems and to let readers more easily find the information that they desire.

2.1. Length and Dimensions

Papers must not exceed eight (8) pages, including all figures, tables, references, and appendices. We will return to the authors any submissions that exceed this page limit or that diverge significantly from the format specified herein.

The text of the paper should be formatted in two columns, with an overall width of 6.75 inches, length of 9.0 inches, and 0.25 inches between the columns. The left margin should be 0.75 inches and the top margin 1.0 inch (2.54 cm). The right and bottom margins will depend on whether you print on US letter or A4 paper.

The paper body should be set in 10 point type with a vertical spacing of 11 points. Please use Times Roman typeface throughout the text.

2.2. Title

The paper title should be set in 14 point bold type and centered between two horizontal rules that are 1 point thick, with 1.0 inch between the top rule and the top edge of the page. Capitalize the first letter of content words and put the rest of the title in lower case.

2.3. Author Information for Submission

To facilitate blind review, author information must not appear. In place of the author name(s) and affiliation(s) **keywords** will be given. If you are using

L^AT_EX and the `icml2005.sty` file, simply replace the author name and address by the **keywords** as follows:

```
\icmlauthor{}{}
```

```
\icmladdress{keyword1,...,keywordN}
```

Submissions that do not replace author information will not be reviewed.

2.3.1. CAMERA-READY AUTHOR INFORMATION

If a paper is accepted (or conditionally accepted) a final camera-ready copy must be prepared which includes the usual author information.

For camera-ready papers, author information should start 0.3 inches below the bottom rule surrounding the title. The authors' names should appear in 10 point bold type, electronic mail addresses in 10 point small capitals, and physical addresses in ordinary 10 point type. Each author's name should be flush left, whereas the email address should be flush right on the same line. The author's physical address should appear flush left on the ensuing line, on a single line if possible. If successive authors have the same affiliation, then give their physical address only once.

2.4. Abstract

The paper abstract should begin in the left column, 0.4 inches below the final address. The heading 'Abstract' should be centered, bold, and in 11 point type. The abstract body should use 10 point type, with a vertical spacing of 11 points, and should be indented 0.25 inches more than normal on left-hand and right-hand margins. Insert 0.4 inches of blank space after the body. Keep your abstract brief, limiting it to one paragraph and no more than six or seven sentences.

2.5. Partitioning the Text

You should organize your paper into sections and paragraphs to help readers place a structure on the material and understand its contributions.

2.5.1. SECTIONS AND SUBSECTIONS

Section headings should be numbered, flush left, and set in 11 pt bold type with the content words capitalized. Leave 0.25 inches of space before the heading and 0.15 inches after the heading.

Similarly, subsection headings should be numbered, flush left, and set in 10 pt bold type with the content words capitalized. Leave 0.2 inches of space before the heading and 0.13 inches afterward.

Finally, subsubsection headings should be numbered,

flush left, and set in 10 pt small caps with the content words capitalized. Leave 0.18 inches of space before the heading and 0.1 inches after the heading. Please use no more than three levels of headings.

2.5.2. PARAGRAPHS AND FOOTNOTES

Within each section or subsection, you should further partition the paper into paragraphs. Do not indent the first line of a given paragraph, but insert a blank line between succeeding ones.

You can use footnotes¹ to provide readers with additional information about a topic without interrupting the flow of the paper. Indicate footnotes with a number in the text where the point is most relevant. Place the footnote in 9 point type at the bottom of the column in which it appears. Precede the first footnote in a column with a horizontal rule of 0.8 inches.²

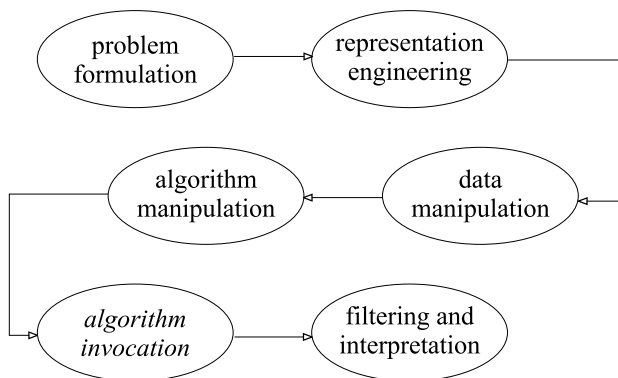


Figure 1. Steps in the computational discovery process at which the developer can influence system behavior.

2.6. Figures

You may want to include figures in the paper to help readers visualize your approach and your results. Such artwork should be centered, legible, and separated from the text. Lines should be dark and at least 0.5 points thick for purposes of reproduction, and text should not appear on a gray background.

Label all distinct components of each figure. If the figure takes the form of a graph, then give a name for each axis and include a legend that briefly describes each curve. However, do *not* include a title above the

¹For the sake of readability, footnotes should be complete sentences.

²Multiple footnotes can appear in each column, in the same order as they appear in the text, but spread them across columns and pages if possible.

Table 1. Classification accuracies for naive Bayes and flexible Bayes on various data sets.

DATA SET	NAIVE	FLEXIBLE	BETTER?
BREAST	95.9± 0.2	96.7± 0.2	✓
CLEVELAND	83.3± 0.6	80.0± 0.6	×
CREDIT	74.8± 0.5	78.3± 0.6	
GLASS2	61.9± 1.4	83.8± 0.7	✓
HORSE	73.3± 0.9	69.7± 1.0	×
META	67.1± 0.6	76.5± 0.5	✓
PIMA	75.1± 0.6	73.9± 0.5	
VEHICLE	44.9± 0.6	61.5± 0.4	✓

figure, as the caption already serves this function.

Number figures sequentially, placing the figure number and caption *after* the graphics, with at least 0.1 inches of space before the caption and 0.1 inches after it, as in Figure 1. The figure caption should be set in 9 point type and centered unless it runs two or more lines, in which case it should be flush left. You may float figures to the top or bottom of a column, and you may set wide figures across both columns, but always place two-column figures at the top or bottom of the page.

2.7. Tables

You may also want to include tables that summarize material. Like figures, these should be centered, legible, and numbered consecutively. However, place the title *above* the table with at least 0.1 inches of space before the title and the same after it, as in Table 1. The table title should be set in 9 point type and centered unless it runs two or more lines, in which case it should be flush left.

Tables contain textual material that can be typeset, as contrasted with figures, which contain graphical material that must be drawn. Specify the contents of each row and column in the table's topmost row. Again, you may float tables to a column's top or bottom, and set wide tables across both columns, but place two-column tables at the top or bottom of the page.

2.8. Citations and References

Authors should cite their own work in the third person in the initial version of their paper submitted for blind review.

Please use APA reference format regardless of your formatter or word processor. If you rely on the L^AT_EX bibliographic facility, use `mlapa.sty` and `mlapa.bst` at the ICML-2005 web site to obtain this format.

Citations within the text should include the authors' last names and year. If the authors' names are included in the sentence, place only the year in parentheses, as in Jones and VanLehn (1994), but otherwise place the entire reference in parentheses with the authors and year separated by a comma (Jones & VanLehn, 1994).

List multiple references alphabetically and separate them by semicolons (Jones & VanLehn, 1994; Veloso & Carbonell, 1993). Use the 'et al.' construct only for citations with four or more authors or after listing all authors to a publication in an earlier reference.

Use an unnumbered first-level section heading for the references, and use a hanging indent style, with the first line of the reference flush against the left margin and subsequent lines indented by 10 points. The references at the end of this document give examples for journal articles, conference publications, book chapters, books, edited volumes, technical reports, and dissertations.

Alphabetize references by the surnames of the first authors, with single author entries preceding multiple author entries. Order references for the same authors by year of publication, with the earliest first.

Acknowledgments

Do not include acknowledgements in the initial version of the paper submitted for blind review.

If a paper is accepted or conditionally accepted, the final camera-ready version can (and probably should) include acknowledgements. In this case, please place such acknowledgements in an unnumbered section at the end of the paper. Typically, this will include thanks to reviewers who gave useful comments, to colleagues who contributed to the ideas, and to funding agencies and corporate sponsors that provided financial support.

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