
Submission and Formatting Instructions for the Thirtieth International Conference on Machine Learning (ICML 2013)

Abstract

There are three review cycles for ICML 2013, with full paper submissions due on October 1, 2012; December 15, 2012; and February 15, 2013. Reviewing will be blind to the identities of the authors, and therefore identifying information must not appear in any way in papers submitted for review. Submissions must be in PDF, with an 8 page length limit (upto 9 pages including references).

1. Electronic Submission

As in the past few years, ICML will rely exclusively on electronic formats for submission and review.

1.1. Templates for Papers

Electronic templates for producing papers for submission are available for L^AT_EX and Microsoft Word. Templates are accessible on the World Wide Web at: <http://icml.cc/2013/>

Send questions about these electronic templates to program@icml.cc.

The formatting instructions below will be enforced for initial submissions and camera-ready copies.

- The maximum paper length is 8 pages excluding references, and 9 pages including references.
- Do not alter the style template; in particular, do not compress the paper format by reducing the vertical spaces.
- Do not include author information or acknowledgments in your initial submission.
- Place figure captions *under* the figure (and omit titles from inside the graphic file itself). Place table captions *over* the table.

Preliminary work. Under review by the International Conference on Machine Learning (ICML). Do not distribute.

- References must include page numbers whenever possible and be as complete as possible. Place multiple citations in chronological order.

Please see below for details on each of these items.

1.2. Submitting Papers

Submission to ICML 2013 will be entirely electronic, via a web site (not email). The URL and information about the submission process are available on the conference web site at

<http://icml.cc/2013/>

Paper Deadline: The deadline for paper submission to ICML 2013 is at 23:59 Universal Time (3:59 Pacific Daylight Time) on the due date (October 1, December 15, or February 15, depending on the review cycle). If your full submission does not reach us by this time, it will not be considered for publication. There is no separate abstract submission.

Anonymous Submission: To facilitate blind review, no identifying author information should appear on the title page or in the paper itself. Section 2.3 will explain the details of how to format this.

Simultaneous Submission: ICML will not accept any paper which, at the time of submission, is under review for another conference or has already been published. This policy also applies to papers that overlap substantially in technical content with conference papers under review or previously published. ICML submissions must not be submitted to other conferences during ICML's review period. Authors may submit to ICML substantially different versions of journal papers that are currently under review by the journal, but not yet accepted at the time of submission. Informal publications, such as technical reports or papers in workshop proceedings which do not appear in print, do not fall under these restrictions.

To ensure our ability to print submissions, authors must provide their manuscripts in **PDF** format. Furthermore, please make sure that files contain only Type-1 fonts (e.g., using the program `pdffonts` in

linux or using File/DocumentProperties/Fonts in Acrobat). Other fonts (like Type-3) might come from graphics files imported into the document.

Authors using **Word** must convert their document to PDF. Most of the latest versions of Word have the facility to do this automatically. Submissions will not be accepted in Word format or any format other than PDF. Really. We're not joking. Don't send Word.

Those who use **L^AT_EX** to format their accepted papers need to pay close attention to the typefaces used. Specifically, when producing the PDF by first converting the dvi output of **L^AT_EX** to Postscript the default behavior is to use non-scalable Type-3 PostScript bitmap fonts to represent the standard **L^AT_EX** 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 something like the following commands:

```
dvips -Ppdf -tletter -G0 -o paper.ps paper.dvi
ps2pdf paper.ps
```

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 **L^AT_EX**. 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.

Note that the 2013 style files use the `hyperref` package to make clickable links in documents. If this causes problems for you, add `nohyperref` as one of the options to the `icml2013` `usepackage` statement.

1.3. Reacting to Reviews

We will continue the ICML tradition in which the authors are given the option of providing a short reaction to the initial reviews. These reactions will be taken into account in the discussion among the reviewers and area chairs.

1.4. Submitting Final Camera-Ready Copy

The final versions of papers accepted for publication 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 2.3.2 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 “*Proceedings of the 30th International Conference on Machine Learning*, Atlanta, Georgia, USA, 2013. JMLR: W&CP volume 28. Copyright 2013 by the author(s).”

For those using the **L^AT_EX** style file, simply change `\usepackage{icml2013}` to

```
\usepackage[accepted]{icml2013}
```

Authors using **Word** must edit the footnote on the first page of the document themselves.

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 **L^AT_EX** style file, the original title is automatically set as running head using the `fancyhdr` package which is included in the ICML 2013 style file package. 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.

2. Format of the Paper

All submissions must 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, and appendices, but excluding references. When references are included, the paper must not exceed nine (9) pages. Any submission that exceeds this page limit or that diverges significantly from the format specified herein will be rejected without review.

The text of the paper should be formatted in two columns, with an overall width of 6.75 inches, height 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,

220	but all final versions must be produced for US letter	should appear flush left on the ensuing line, on a single	275
221	size.	line if possible. If successive authors have the same	276
222		affiliation, then give their physical address only once.	277
223	The paper body should be set in 10 point type with a		278
224	vertical spacing of 11 points. Please use Times Roman	A sample file (in PDF) with author names is included	279
225	typeface throughout the text.	in the ICML2013 style file package.	280
226			281
227	2.2. Title	2.4. Abstract	282
228	The paper title should be set in 14 point bold type and	The paper abstract should begin in the left column,	283
229	centered between two horizontal rules that are 1 point	0.4 inches below the final address. The heading ‘Ab-	284
230	thick, with 1.0 inch between the top rule and the top	stract’ should be centered, bold, and in 11 point type.	285
231	edge of the page. Capitalize the first letter of content	The abstract body should use 10 point type, with a	286
232	words and put the rest of the title in lower case.	vertical spacing of 11 points, and should be indented	287
233		0.25 inches more than normal on left-hand and right-	288
234	2.3. Author Information for Submission	hand margins. Insert 0.4 inches of blank space after	289
235		the body. Keep your abstract brief and self-contained,	290
236	To facilitate blind review, author information must not	limiting it to one paragraph and no more than six or	291
237	appear. If you are using L ^A T _E X and the <code>icml2013.sty</code>	seven sentences.	292
238	file, you may use <code>\icmlauthor{...}</code> to specify au-		293
239	thors. The author information will simply not be	2.5. Partitioning the Text	294
240	printed until <code>accepted</code> is an argument to the style		295
241	file. Submissions that include the author information	You should organize your paper into sections and para-	296
242	will not be reviewed.	graphs to help readers place a structure on the material	297
243		and understand its contributions.	298
244	2.3.1. SELF-CITATIONS		299
245	If your are citing published papers for which you are	2.5.1. SECTIONS AND SUBSECTIONS	300
246	an author, refer to yourself in the third person. In		301
247	particular, do not use phrases that reveal your iden-	Section headings should be numbered, flush left, and	302
248	tity (e.g., “in previous work (Langley, 2000), we have	set in 11 pt bold type with the content words capi-	303
249	shown ...”).	talized. Leave 0.25 inches of space before the heading	304
250		and 0.15 inches after the heading.	305
251	Do not anonymize citations in the reference section	Similarly, subsection headings should be numbered,	306
252	by removing or blacking out author names. The only	flush left, and set in 10 pt bold type with the content	307
253	exception are manuscripts that are not yet published	words capitalized. Leave 0.2 inches of space before the	308
254	(e.g. under submission). If you choose to refer to such	heading and 0.13 inches afterward.	309
255	unpublished manuscripts (Author, 2011), anonymized		310
256	copies have to be submitted as Supplementary Mate-	Finally, subsubsection headings should be numbered,	311
257	rial via CMT. However, keep in mind that an ICML	flush left, and set in 10 pt small caps with the content	312
258	paper should be self contained and should contain suf-	words capitalized. Leave 0.18 inches of space before	313
259	ficient detail for the reviewers to evaluate the work.	the heading and 0.1 inches after the heading.	314
260	In particular, reviewers are not required to look at the	Please use no more than three levels of headings.	315
261	Supplementary Material when writing their review.		316
262		2.5.2. PARAGRAPHS AND FOOTNOTES	317
263	2.3.2. CAMERA-READY AUTHOR INFORMATION		318
264		Within each section or subsection, you should further	319
265	If a paper is accepted, a final camera-ready copy must	partition the paper into paragraphs. Do not indent	320
266	be prepared. For camera-ready papers, author infor-	the first line of a given paragraph, but insert a blank	321
267	mation should start 0.3 inches below the bottom rule	line between succeeding ones.	322
268	surrounding the title. The authors’ names should ap-		323
269	pear in 10 point bold type, electronic mail addresses	You can use footnotes ¹ to provide readers with addi-	324
270	in 10 point small capitals, and physical addresses in	tional information about a topic without interrupting	325
271	ordinary 10 point type. Each author’s name should be	the flow of the paper. Indicate footnotes with a num-	326
272	flush left, whereas the email address should be flush		327
273	right on the same line. The author’s physical address	¹ For the sake of readability, footnotes should be com-	328
274		plete sentences.	329

ber 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

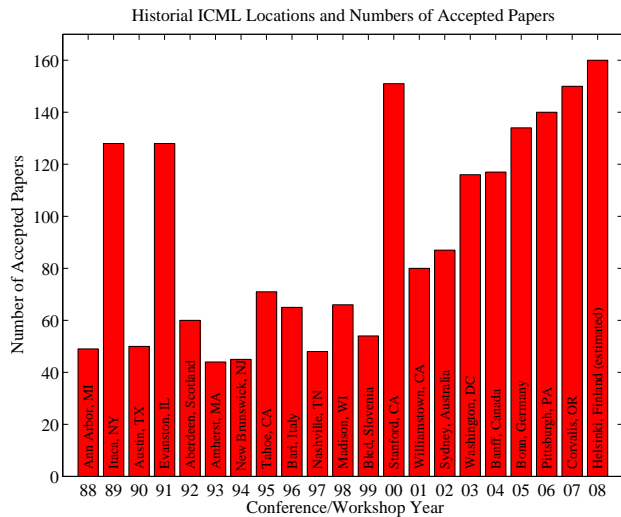


Figure 1. Historical locations and number of accepted papers for International Machine Learning Conferences (ICML 1993 – ICML 2008) and International Workshops on Machine Learning (ML 1988 – ML 1992). At the time this figure was produced, the number of accepted papers for ICML 2008 was unknown and instead estimated.

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. Do not include a title inside the figure; instead, the caption should serve 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

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.

Algorithm 1 Bubble Sort

```

Input: data  $x_i$ , size  $m$ 
repeat
  Initialize  $noChange = true$ .
  for  $i = 1$  to  $m - 1$  do
    if  $x_i > x_{i+1}$  then
      Swap  $x_i$  and  $x_{i+1}$ 
       $noChange = false$ 
    end if
  end for
until  $noChange$  is  $true$ 

```

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	×
GLASS2	61.9± 1.4	83.8± 0.7	✓
CREDIT	74.8± 0.5	78.3± 0.6	
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	✓

set wide figures across both columns (use the environment `figure*` in L^AT_EX), but always place two-column figures at the top or bottom of the page.

2.7. Algorithms

If you are using L^AT_EX, please use the “algorithm” and “algorithmic” environments to format pseudocode. These require the corresponding stylefiles, `algorithm.sty` and `algorithmic.sty`, which are supplied with this package. Algorithm 1 shows an example.

2.8. 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.

2.9. Citations and References

Please use APA reference format regardless of your formatter or word processor. If you rely on the L^AT_EX bibliographic facility, use `natbib.sty` and `icml2013.bst` included in the style-file package 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, for example when referencing Arthur Samuel's pioneering work (1959). Otherwise place the entire reference in parentheses with the authors and year separated by a comma (Samuel, 1959). List multiple references separated by semicolons (Kearns, 1989; Samuel, 1959; Mitchell, 1980). Use the 'et al.' construct only for citations with three or more authors or after listing all authors to a publication in an earlier reference (Michalski et al., 1983).

Authors should cite their own work in the third person in the initial version of their paper submitted for blind review. Please refer to Section 2.3 for detailed instructions on how to cite your own papers.

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 (Samuel, 1959), conference publications (Langley, 2000), book chapters (Newell & Rosenbloom, 1981), books (Duda et al., 2000), edited volumes (Michalski et al., 1983), technical reports (Mitchell, 1980), and dissertations (Kearns, 1989).

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. Make sure that each reference includes all relevant information (e.g., page numbers).

2.10. Software and Data

We strongly encourage the publication of software and data with the camera-ready version of the paper whenever appropriate. This can be done by including a URL in the camera-ready copy. However, do not include URLs that reveal your institution or identity in your submission for review. Instead, provide an anonymous URL or upload the material as "Supplementary Material" into the CMT reviewing system. Note that reviewers are not required to look at this material when

writing their review.

Acknowledgments

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

If a paper is 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.

References

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