
Submission and Formatting Instructions for International Conference on Machine Learning (ICML 2017)

Abstract

The purpose of this document is to provide both the basic paper template and submission guidelines. Abstracts should be a single paragraph, between 4–6 sentences long, ideally. Gross violations will trigger corrections at the camera-ready phase.

1. Electronic Submission

Submission to ICML 2017 will be entirely electronic, via a web site (not email). Information about the submission process and `LATEX` templates are available on the conference web site at:

<http://icml.cc/2017/>

Send questions about submission and electronic templates to icml2017pc@gmail.com.

The guidelines below will be enforced for initial submissions and camera-ready copies. Here is a brief summary:

- Submissions must be in PDF.
- The maximum paper length is **8 pages excluding references and acknowledgements, and 10 pages including references and acknowledgements** (pages 9 and 10 must contain only references and acknowledgements).
- **Do not include author information or acknowledgements** in your initial submission.
- Your paper should be in **10 point Times font**.
- Make sure your PDF file only uses Type-1 fonts.
- Place figure captions *under* the figure (and omit titles from inside the graphic file itself). Place table captions *over* the table.

- References must include page numbers whenever possible and be as complete as possible. Place multiple citations in chronological order.
- Do not alter the style template; in particular, do not compress the paper format by reducing the vertical spaces.
- Keep your abstract brief and self-contained, one paragraph and roughly 4–6 sentences. Gross violations will require correction at the camera-ready phase. Title should have content words capitalized.

1.1. Submitting Papers

Paper Deadline: The deadline for paper submission to ICML 2017 is at **23:59 Universal Time (3:59 p.m. Pacific Standard Time) on February 24, 2017**. 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

110 (like Type-3) might come from graphics files imported into
 111 the document.

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

117 Those who use **L^AT_EX** to format their accepted papers need
 118 to pay close attention to the typefaces used. Specifically,
 119 when producing the PDF by first converting the dvi output
 120 of **L^AT_EX** to Postscript the default behavior is to use non-
 121 scalable Type-3 PostScript bitmap fonts to represent the
 122 standard **L^AT_EX** fonts. The resulting document is difficult
 123 to read in electronic form; the type appears fuzzy. To avoid
 124 this problem, dvips must be instructed to use an alterna-
 125 tive font map. This can be achieved with the following two
 126 commands:

127
 128 dvips -Ppdf -tletter -G0 -o paper.ps paper.dvi
 129 ps2pdf paper.ps

130
 131 Note that it is a zero following the “-G”. This tells dvips to
 132 use the config.pdf file (and this file refers to a better font
 133 mapping).

134
 135 A better alternative is to use the **pdflatex** program instead
 136 of straight **L^AT_EX**. This program avoids the Type-3 font
 137 problem, however you must ensure that all of the fonts are
 138 embedded (use **pdffonts**). If they are not, you need to
 139 configure pdflatex to use a font map file that specifies that
 140 the fonts be embedded. Also you should ensure that im-
 141 ages are not downsampled or otherwise compressed in a
 142 lossy way.

143
 144 Note that the 2017 style files use the **hyperref** package
 145 to make clickable links in documents. If this causes prob-
 146 lems for you, add **nohyperref** as one of the options to
 147 the **icml2017** usepackage statement.

148 149 1.2. Reacting to Reviews

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

154 155 1.3. Submitting Final Camera-Ready Copy

156 The final versions of papers accepted for publication should
 157 follow the same format and naming convention as initial
 158 submissions, except of course that the normal author in-
 159 formation (names and affiliations) should be given. See
 160 Section 2.3.2 for details of how to format this.

161
 162 The footnote, “Preliminary work. Under review by the In-
 163 ternational Conference on Machine Learning (ICML). Do
 164

165 not distribute.” must be modified to “*Proceedings of the*
 166 *34th International Conference on Machine Learning*, Syd-
 167 *ney, Australia, 2017. JMLR: W&CP. Copyright 2017 by*
 168 *the author(s).*”

169 For those using the **L^AT_EX** style file, simply change
 170 **\usepackage{icml2017}** to

171
 172 **\usepackage[accepted]{icml2017}**

173
 174 Authors using **Word** must edit the footnote on the first page
 175 of the document themselves.

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 177 Camera-ready copies should have the title of the paper as
 178 running head on each page except the first one. The run-
 179 ning title consists of a single line centered above a hori-
 180 zontal rule which is 1 point thick. The running head should
 181 be centered, bold and in 9 point type. The rule should be
 182 10 points above the main text. For those using the **L^AT_EX**
 183 style file, the original title is automatically set as running
 184 head using the **fancyhdr** package which is included in
 185 the ICML 2017 style file package. In case that the origi-
 186 nal title exceeds the size restrictions, a shorter form can be
 187 supplied by using

188
 189 **\icmltitlerunning{...}**

190
 191 just before **\begin{document}**. Authors using **Word**
 192 must edit the header of the document themselves.

193 2. Format of the Paper

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

197 2.1. Length and Dimensions

198 Papers must not exceed eight (8) pages, including all fig-
 199 ures, tables, and appendices, but excluding references and
 200 acknowledgements. When references and acknowledg-
 201 ments are included, the paper must not exceed ten (10)
 202 pages. Acknowledgements should be limited to grants and
 203 people who contributed to the paper. Any submission that
 204 exceeds this page limit or that diverges significantly from
 205 the format specified herein will be rejected without review.

206 The text of the paper should be formatted in two columns,
 207 with an overall width of 6.75 inches, height of 9.0 inches,
 208 and 0.25 inches between the columns. The left margin
 209 should be 0.75 inches and the top margin 1.0 inch
 210 (2.54 cm). The right and bottom margins will depend on
 211 whether you print on US letter or A4 paper, but all final
 212 versions must be produced for US letter size.

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 214 The paper body should be set in 10 point type with a
 215 vertical spacing of 11 points. Please use Times typeface

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220	throughout the text.	275
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232	2.2. Title	287
233	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.	288
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238	2.3. Author Information for Submission	293
239	To facilitate blind review, author information must not appear. If you are using L ^A T _E X and the <code>icml2017.sty</code> file, you may use <code>\icmlauthor{...}</code> to specify authors. The author information will simply not be printed until <code>accepted</code> is an argument to the style file. Submissions that include the author information will not be reviewed.	294
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244	2.3.1. SELF-CITATIONS	299
245	If your are citing published papers for which you are an author, refer to yourself in the third person. In particular, do not use phrases that reveal your identity (e.g., “in previous work (Langley, 2000), we have shown ...”).	300
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256	2.3.2. CAMERA-READY AUTHOR INFORMATION	311
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258	If a paper is accepted, a final camera-ready copy must be prepared. 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.	313
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270	A sample file (in PDF) with author names is included in the ICML2017 style file package.	325
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	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 and self-contained, limiting it to one paragraph and roughly 4–6 sentences. Gross violations will require correction at the camera-ready phase.	
	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 footnotes ¹ 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	
	¹ For the sake of readability, footnotes should be complete sentences.	
	² Multiple 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.	

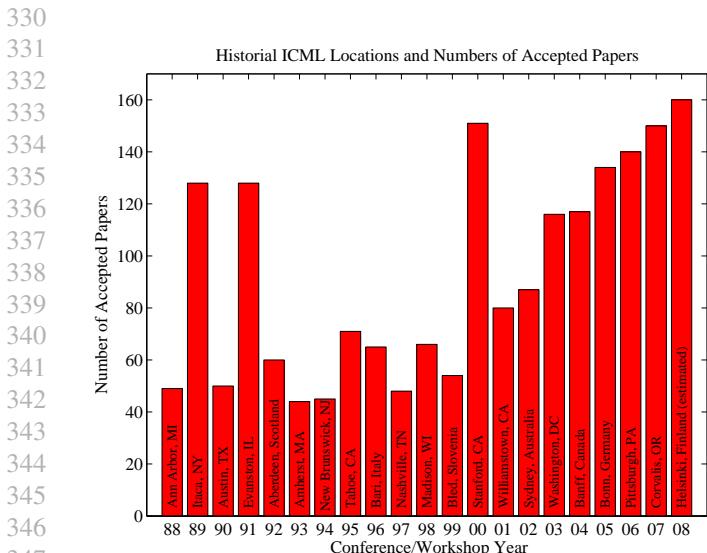


Figure 1. Historical locations and number of accepted papers for International Machine Learning Conferences (ICML 1993 – ICML 2008) and International Workshops on Machine Learning (ML 1988 – ML 1992). At the time this figure was produced, the number of accepted papers for ICML 2008 was unknown and instead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

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	✓

quire 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 `icml2017 bst` included in the style-file package to obtain this format.

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440	Citations within the text should include the authors' last	495
441	names and year. If the authors' names are included in the	496
442	sentence, place only the year in parentheses, for example	497
443	when referencing Arthur Samuel's pioneering work (1959).	498
444	Otherwise place the entire reference in parentheses with the	499
445	authors and year separated by a comma (Samuel, 1959).	500
446	List multiple references separated by semicolons (Kearns,	501
447	1989; Samuel, 1959; Mitchell, 1980). Use the 'et al.' construct	502
448	only for citations with three or more authors or after	503
449	listing all authors to a publication in an earlier reference	504
450	(Michalski et al., 1983).	505
451	Authors should cite their own work in the third person in	506
452	the initial version of their paper submitted for blind review.	507
453	Please refer to Section 2.3 for detailed instructions on how	508
454	to cite your own papers.	509
455	Authors should cite their own work in the third person in	510
456	the initial version of their paper submitted for blind review.	511
457	Please refer to Section 2.3 for detailed instructions on how	512
458	to cite your own papers.	513
459	Use an unnumbered first-level section heading for the references,	514
460	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	515
461	end of this document give examples for journal articles	516
462	(Samuel, 1959), conference publications (Langley, 2000),	517
463	book chapters (Newell & Rosenbloom, 1981), books (Duda	518
464	et al., 2000), edited volumes (Michalski et al., 1983), technical	519
465	reports (Mitchell, 1980), and dissertations (Kearns,	520
466	1989).	521
467	Alphabetize references by the surnames of the first authors,	522
468	with single author entries preceding multiple author entries.	523
469	Order references for the same authors by year of publication,	524
470	with the earliest first. Make sure that each reference	525
471	includes all relevant information (e.g., page numbers).	526
472	2.10. Software and Data	527
473	We strongly encourage the publication of software and data	528
474	with the camera-ready version of the paper whenever appropriate.	529
475	This can be done by including a URL in the	530
476	camera-ready copy. However, do not include URLs that	531
477	reveal your institution or identity in your submission for	532
478	review. Instead, provide an anonymous URL or upload	533
479	the material as "Supplementary Material" into the CMT	534
480	reviewing system. Note that reviewers are not required to	535
481	look at this material when writing their review.	536
482		537
483		538
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485	Acknowledgements	540
486	Do not include acknowledgements in the initial version of	541
487	the paper submitted for blind review.	542
488	If a paper is accepted, the final camera-ready version can	543
489	(and probably should) include acknowledgements. In this	544
490	case, please place such acknowledgements in an unnumbered	545
491	section at the end of the paper. Typically, this will	546
492	include thanks to reviewers who gave useful comments,	547
493		548
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