# L<sup>A</sup>T<sub>E</sub>X Author Guidelines for CVPR Proceedings

Anonymous CVPR 2021 submission

Paper ID \*\*\*\*

## **Abstract**

The ABSTRACT is to be in fully-justified italicized text, at the top of the left-hand column, below the author and affiliation information. Use the word "Abstract" as the title, in 12-point Times, boldface type, centered relative to the column, initially capitalized. The abstract is to be in 10-point, single-spaced type. Leave two blank lines after the Abstract, then begin the main text. Look at previous CVPR abstracts to get a feel for style and length.

## 1. Introduction

Please follow the steps outlined below when submitting your manuscript to the IEEE Computer Society Press. This style guide now has several important modifications (for example, you are no longer warned against the use of sticky tape to attach your artwork to the paper), so all authors should read this new version.

#### 1.1. Language

All manuscripts must be in English.

#### 1.2. Dual submission

Please refer to the author guidelines on the CVPR 2021 web page for a discussion of the policy on dual submissions.

## 1.3. Paper length

Papers, excluding the references section, must be no longer than eight pages in length. The references section will not be included in the page count, and there is no limit on the length of the references section. For example, a paper of eight pages with two pages of references would have a total length of 10 pages. There will be no extra page charges for CVPR 2021.

Overlength papers will simply not be reviewed. This includes papers where the margins and formatting are deemed to have been significantly altered from those laid down by this style guide. Note that this LaTeX guide already sets figure captions and references in a smaller font. The reason

such papers will not be reviewed is that there is no provi-066 sion for supervised revisions of manuscripts. The review-067 ing process cannot determine the suitability of the paper for 069 presentation in eight pages if it is reviewed in eleven.

#### 1.4. The ruler

The LATEX style defines a printed ruler which should be 073 present in the version submitted for review. The ruler is provided in order that reviewers may comment on particular lines in the paper without circumlocution. If you are 076 preparing a document using a non-LATEX document preparation system, please arrange for an equivalent ruler to appear 078 on the final output pages. The presence or absence of the 079 ruler should not change the appearance of any other content on the page. The camera ready copy should not contain a 081 ruler. (LATEX users may use options of cvpr.cls to switch 082 between different versions.) Reviewers: note that the ruler 083 measurements do not align well with lines in the paper  $-\frac{1}{084}$ this turns out to be very difficult to do well when the pa-085 per contains many figures and equations, and, when done, 086 looks ugly. Just use fractional references (e.g. this line is 095.5), although in most cases one would expect that the approximate location will be adequate.

## 1.5. Mathematics

Please number all of your sections and displayed equa-092 tions. It is important for readers to be able to refer to any093 particular equation. Just because you didn't refer to it in094 the text doesn't mean some future reader might not need095 to refer to it. It is cumbersome to have to use circumlo-096 cutions like "the equation second from the top of page 3097 column 1". (Note that the ruler will not be present in the098 final copy, so is not an alternative to equation numbers).099 All authors will benefit from reading Mermin's description100 of how to write mathematics: http://www.pamitc.101org/documents/mermin.pdf.

## 1.6. Blind review

Many authors misunderstand the concept of anonymiz-105 ing for blind review. Blind review does not mean that one106 must remove citations to one's own work—in fact it is often107

impossible to review a paper unless the previous citations are known and available.

Blind review means that you do not use the words "my" or "our" when citing previous work. That is all. (But see below for techreports.)

Saying "this builds on the work of Lucy Smith [1]" does not say that you are Lucy Smith; it says that you are building on her work. If you are Smith and Jones, do not say "as we show in [7]", say "as Smith and Jones show in [7]" and at the end of the paper, include reference 7 as you would any other cited work.

An example of a bad paper just asking to be rejected:

An analysis of the frobnicatable foo filter.

In this paper we present a performance analysis of our previous paper [1], and show it to be inferior to all previously known methods. Why the previous paper was accepted without this analysis is beyond me.

[1] Removed for blind review

An example of an acceptable paper:

An analysis of the frobnicatable foo filter.

In this paper we present a performance analysis of the paper of Smith *et al.* [1], and show it to be inferior to all previously known methods. Why the previous paper was accepted without this analysis is beyond me.

[1] Smith, L and Jones, C. "The frobnicatable foo filter, a fundamental contribution to human knowledge". Nature 381(12), 1-213.

If you are making a submission to another conference at the same time, which covers similar or overlapping material, you may need to refer to that submission in order to explain the differences, just as you would if you had previously published related work. In such cases, include the anonymized parallel submission [4] as additional material and cite it as

[1] Authors. "The frobnicatable foo filter", F&G 2014 Submission ID 324, Supplied as additional material fg324.pdf.

Finally, you may feel you need to tell the reader that more details can be found elsewhere, and refer them to a technical report. For conference submissions, the paper must stand on its own, and not *require* the reviewer to go to a techreport for further details. Thus, you may say in the body of the paper "further details may be found in [5]". Then submit the techreport as additional material. Again, you may not assume the reviewers will read this material.

Sometimes your paper is about a problem which you 162 tested using a tool which is widely known to be restricted 163 to a single institution. For example, let's say it's 1969, you 164 have solved a key problem on the Apollo lander, and you 165 believe that the CVPR70 audience would like to hear about 166 your solution. The work is a development of your celebrated 1968 paper entitled "Zero-g frobnication: How be-169 ing the only people in the world with access to the Apollo 169 lander source code makes us a wow at parties", by Zeus et 170 al

You can handle this paper like any other. Don't write 173 "We show how to improve our previous work [Anonymous, 174 1968]. This time we tested the algorithm on a lunar lander 175 [name of lander removed for blind review]". That would be 176 silly, and would immediately identify the authors. Instead 177 write the following:

We describe a system for zero-g frobnication. This system is new because it handles the following cases: A, B. Previous systems [Zeus et al. 1968] didn't handle case B properly. Ours handles it by including a foo term in the bar integral.

The proposed system was integrated with the Apollo lunar lander, and went all the way to the moon, don't you know. It displayed the following behaviours which show how well we solved cases A and B: ...

As you can see, the above text follows standard scientific convention, reads better than the first version, and does not explicitly name you as the authors. A reviewer might think it likely that the new paper was written by Zeus *et al.*, but cannot make any decision based on that guess. He or she would have to be sure that no other authors could have been 197 contracted to solve problem B.

**FAQ** 

Q: Are acknowledgements OK?A: No. Leave them for the final copy.

Q: How do I cite my results reported in open challenges?<sup>205</sup>
A: To conform with the double blind review policy, you<sup>206</sup>
can report results of other challenge participants together<sup>207</sup>
with your results in your paper. For your results, however,<sup>208</sup>
you should not identify yourself and should not mention<sup>209</sup>
your participation in the challenge. Instead present your<sup>210</sup>
results referring to the method proposed in your paper and<sup>211</sup>
draw conclusions based on the experimental comparison to<sup>212</sup>
other results.



Figure 1. Example of caption. It is set in Roman so that mathematics (always set in Roman:  $B \sin A = A \sin B$ ) may be included without an ugly clash.

#### 1.7. Miscellaneous

Compare the following:

 $conf_a$   $mathit{conf}_a$ See The TpXbook, p165.

The space after e.g., meaning "for example", should not be a sentence-ending space. So e.g. is correct, e.g. is not. The provided  $\setminus eg$  macro takes care of this.

When citing a multi-author paper, you may save space by using "et alia", shortened to "et al." (not "et. al." as "et" is a complete word.) However, use it only when there are three or more authors. Thus, the following is correct: "Frobnication has been trendy lately. It was introduced by Alpher [1], and subsequently developed by Alpher and Fotheringham-Smythe [2], and Alpher et al. [3]."

This is incorrect: "... subsequently developed by Alpher  $et\ al.$  [2] ..." because reference [2] has just two authors. If you use the \etal macro provided, then you need not worry about double periods when used at the end of a sentence as in Alpher  $et\ al.$ 

For this citation style, keep multiple citations in numerical (not chronological) order, so prefer [2, 1, 4] to [1, 2, 4].

## 2. Formatting your paper

All text must be in a two-column format. The total allowable width of the text area is  $6\frac{7}{8}$  inches (17.5 cm) wide by  $8\frac{7}{8}$  inches (22.54 cm) high. Columns are to be  $3\frac{1}{4}$  inches (8.25 cm) wide, with a  $\frac{5}{16}$  inch (0.8 cm) space between them. The main title (on the first page) should begin 1.0 inch (2.54 cm) from the top edge of the page. The second and following pages should begin 1.0 inch (2.54 cm) from the top edge. On all pages, the bottom margin should be 1-1/8 inches (2.86 cm) from the bottom edge of the page for  $8.5 \times 11$ -inch paper; for A4 paper, approximately 1-5/8 inches (4.13 cm) from the bottom edge of the page.

# 2.1. Margins and page numbering

All printed material, including text, illustrations, and 272 charts, must be kept within a print area 6-7/8 inches (17.5273 cm) wide by 8-7/8 inches (22.54 cm) high. Page numbers 274 should be in footer with page numbers, centered and .75275 inches from the bottom of the page and make it start at the 276 correct page number rather than the 4321 in the example .277 To do this fine the line (around line 20)

\setcounter{page}{4321}

where the number 4321 is your assigned starting page.

# 2.2. Type-style and fonts

Wherever Times is specified, Times Roman may also be 285 used. If neither is available on your word processor, please 286 use the font closest in appearance to Times to which you 287 have access.

MAIN TITLE. Center the title 1-3/8 inches (3.49 cm)<sub>289</sub> from the top edge of the first page. The title should be<sub>290</sub> in Times 14-point, boldface type. Capitalize the first let-<sub>291</sub> ter of nouns, pronouns, verbs, adjectives, and adverbs; do<sub>292</sub> not capitalize articles, coordinate conjunctions, or preposi-<sub>293</sub> tions (unless the title begins with such a word). Leave two<sub>294</sub> blank lines after the title.

AUTHOR NAME(s) and AFFILIATION(s) are to be<sub>296</sub> centered beneath the title and printed in Times 12-point,<sub>297</sub> non-boldface type. This information is to be followed by<sub>298</sub> two blank lines.

The ABSTRACT and MAIN TEXT are to be in a two-300 column format.

MAIN TEXT. Type main text in 10-point Times, single-302 spaced. Do NOT use double-spacing. All paragraphs303 should be indented 1 pica (approx. 1/6 inch or 0.422 cm).304 Make sure your text is fully justified—that is, flush left and305 flush right. Please do not place any additional blank lines306 between paragraphs.

Figure and table captions should be 9-point Roman type308 as in Figures 1 and 2. Short captions should be centred. 309 Callouts should be 9-point Helvetica, non-boldface type.310 Initially capitalize only the first word of section titles and311 first-, second-, and third-order headings. 312

FIRST-ORDER HEADINGS. (For example, **1. Intro-3**13 **duction**) should be Times 12-point boldface, initially cap-314 italized, flush left, with one blank line before, and one blank315 line after.

SECOND-ORDER HEADINGS. (For example, 1.1.317 Database elements) should be Times 11-point boldface,318 initially capitalized, flush left, with one blank line before,319 and one after. If you require a third-order heading (we dis-320 courage it), use 10-point Times, boldface, initially capital-321 ized, flush left, preceded by one blank line, followed by a322 period and your text on the same line.

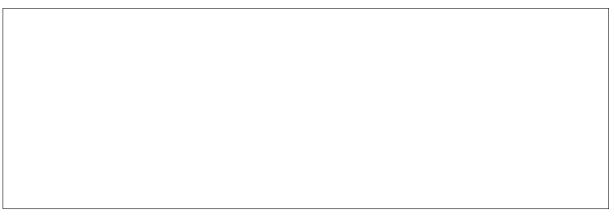


Figure 2. Example of a short caption, which should be centered.

Method	Frobnability
Theirs	Frumpy
Yours	Frobbly
Ours	Makes one's heart Frob

Table 1. Results. Ours is better.

#### 2.3. Footnotes

Please use footnotes<sup>1</sup> sparingly. Indeed, try to avoid footnotes altogether and include necessary peripheral observations in the text (within parentheses, if you prefer, as in this sentence). If you wish to use a footnote, place it at the bottom of the column on the page on which it is referenced. Use Times 8-point type, single-spaced.

## 2.4. References

List and number all bibliographical references in 9-point Times, single-spaced, at the end of your paper. When referenced in the text, enclose the citation number in square brackets, for example [4]. Where appropriate, include the name(s) of editors of referenced books.

## 2.5. Illustrations, graphs, and photographs

All graphics should be centered. Please ensure that any point you wish to make is resolvable in a printed copy of the paper. Resize fonts in figures to match the font in the body text, and choose line widths which render effectively in print. Many readers (and reviewers), even of an electronic copy, will choose to print your paper in order to read it. You cannot insist that they do otherwise, and therefore must not assume that they can zoom in to see tiny details on a graphic.

When placing figures in LATEX, it's almost always best to use \includegraphics, and to specify the figure width

as a multiple of the line width as in the example below

#### **2.6.** Color

Please refer to the author guidelines on the CVPR401 2021 web page for a discussion of the use of color in your402 document.

## 3. Final copy

You must include your signed IEEE copyright release 407 form when you submit your finished paper. We MUST have 408 this form before your paper can be published in the proceedings.

Please direct any questions to the production editor in 411 charge of these proceedings at the IEEE Computer Society Press: https://www.computer.org/about/
contact.

412

#### References

- [1] FirstName Alpher. Frobnication. *IEEE TPAMI*, 12(1):234–417 778, 2002. 3
- [2] FirstName Alpher and FirstName Fotheringham-Smythe.419
   Frobnication revisited. *Journal of Foo*, 13(1):234–778, 2003.420
   3
- [3] FirstName Alpher, FirstName Fotheringham-Smythe, and<sub>422</sub> FirstName Gamow. Can a machine frobnicate? *Journal of*<sub>423</sub> *Foo*, 14(1):234–778, 2004. 3
- [4] FirstName LastName. The frobnicatable foo filter, 2014. Face 425 and Gesture submission ID 324. Supplied as supplemental 426 material fg324.pdf. 2, 3, 4
- [5] FirstName LastName. Frobnication tutorial, 2014. Supplied 428 as supplemental material tr.pdf. 2

<sup>&</sup>lt;sup>1</sup>This is what a footnote looks like. It often distracts the reader from the main flow of the argument.