LATEX Author Guidelines for EUROGRAPHICS Proceedings Manuscripts

SUBMISSION ID

Abstract

The ABSTRACT is to be in fully-justified italicized text, between two horizontal lines, in one-column format, below the author and affiliation information. Use the word "Abstract" as the title, in 9-point Times, boldface type, left-aligned to the text, initially capitalized. The abstract is to be in 9-point, single-spaced type. The abstract may be up to 3 inches (7.62 cm) long. Leave one blank line after the abstract, then add the subject categories according to the ACM Classification Index (see https://www.acm.org/publications/class-2012)

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CCS Concepts

• Computing methodologies → Collision detection; • Hardware → Sensors and actuators; PCB design and layout;

1 1. Introduction

- 2 Please follow the steps outlined in this document very carefully
- 3 when submitting your manuscript to Eurographics.
- You may as well use the LATEX source as a template to typeset
- 5 your own paper. In this case we encourage you to also read the
- 6 LATEX comments embedded in the document.

7 2. Instructions

8 Please read the following carefully.

9 2.1. Language

All manuscripts must be in English.

11 2.2. Margins and page numbering

- All printed material, including text, illustrations, and charts, must
- be kept within a print area 7 inches (17.7 cm) wide by 9.44 inches
- 14 (24 cm) high. Do not write or print anything outside the print area.
- Number your pages on odd sites right above, on even sites left
- above, no page number on the first site. Page numbers should be
- local to each paper in the format $\langle i \rangle of \langle n \rangle$ with i the cur-
- rent page number and n the total number of pages of the respective
- 19 paper.

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2.3. Formatting your paper

- 21 All text with the exception of the abstract must be in a two-column
- 22 format. The total allowable width of the text area including header
- 23 and footer lines is 177 mm (7 inch) wide by 245 mm (9.64 inch)
- 24 high.

Columns are to be 84 mm (3.3 inch) wide, with a 8 mm (0.315 inch) space between them.

The space between the header line and the first line of the text body and between the last line of the text body and the footer line is 5 mm (0.196 inch) each.

2.4. Type-style and fonts

Wherever Times is specified, Times Roman may also be used. If neither is available on your word processor, please use the font closest in appearance to Times that you have access to. Only Type-1 fonts will be accepted.

MAIN TITLE. The title should be in Times 17-point, boldface type and centered. Capitalize the first letter of nouns, pronouns, verbs, adjectives, and adverbs; do not capitalize articles, coordinate conjunctions, or prepositions (unless the title begins with such a word). Leave two blank lines after the title.

AUTHOR NAME(s) and AFFILIATION(s) are to be centered beneath the title and printed in Times 9-point, non-boldface type. This information is to be followed by two blank lines.

The ABSTRACT ist to be in a one-column format. The MAIN TEXT is to be in a two-column format.

MAIN TEXT. Type main text in 9-point Times, single-spaced. Do *not* use double-spacing. All paragraphs should be indented 1 em (the length of the dash in the actual font). Make sure your text is fully justified – that is, flush left and flush right. Please do not place any additional blank lines between paragraphs. Figure and table captions should be 9-point Times boldface type as in Figure 2.

- Long captions should be set as in Figure 1 or Figure 3.
- Figures which need the full textwidth can be typeset as Figure 3.

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Figure 1: 'Empty' figure only to serve as an example of long caption requiring more than one line. It is not typed centered but aligned on both sides.

Callouts should be 9-point Times, non-boldface type. Initially capitalize only the first word of section titles and first-, second-, and third-order headings.

FIRST-ORDER HEADINGS. (For example, **1. Introduction**) should be Times 9-point boldface, initially capitalized, flush left, with one blank line before, and one blank line after.

SECOND-ORDER HEADINGS. (For example, **2.1. Language**) should be Times 9-point boldface, initially capitalized, flush left, with one blank line before, and one after. If you require a third-order heading (we discourage it), use 9-point Times, boldface, initially capitalized, flush left, preceded by one blank line, followed by a period and your text on the same line.

The headline (*authors / title*) must be shortened if it uses the full two column width of the main text. There must be enough space for the page numbers. Please use "et al." if there are more than three authors and specify a shortened version for your title.

69 2.5. Footnotes

Please do *not* use footnotes at all!

2.6. References

List all bibliographical references in 9-point Times, single-spaced, at the end of your paper in alphabetical order. When referenced in the text, enclose the citation index in square brackets, for example [Lou90]. Where appropriate, include the name(s) of editors of referenced books.

For your references please use the following algorithm:

- one author: first 3 chars plus year e.g. [Lou90]
- two, three or four authors: first char of each family name plus year e.g. [FH93] or [KSS97] or [LFTG97]
- more than 4 authors: first char of family name from first 3 authors followed by a '*' followed by the year e.g. [BFH*98] or [FvDF*93]

For BibTeX users a style file eg-alpha.bst and eg-spha-doi.bst is available which uses the above algorithm.

For Biber users a style file EG.bbx is available which uses the above algorithm.

2.7. Illustrations, graphs, and photographs

89 All graphics should be centered.

If your paper includes images, it is very important that they are of sufficient resolution to be faithfully reproduced.

To determine the optimum size (width and height) of an image, measure the image's size as it appears in your document (in mil- 125 limeters), and then multiply those two values by 12. The resulting 126



For all figures please keep in mind that you **must not** use images with transparent background!

Figure 2: Here is a sample figure.

values are the optimum *x* and *y* resolution, in pixels, of the image. Image quality will suffer if these guidelines are not followed.

Example 1: An image measures 50 mm by 75 mm when placed in a document. This image should have a resolution of no less than 600 pixels by 900 pixels in order to be reproduced faithfully.

Example 2: Capturing a screenshot of your entire 1024×768 pixel display monitor may be useful in illustrating a concept from your research. In order to be reproduced faithfully, that 1024×768 image should be no larger than 85 mm by 64 mm (approximately) when placed in your document.

2.8. Color

Please observe: as of 2003 publications in the proceedings of the Eurographics Conference can use color images throughout the paper. No separate color tables are necessary.

However, workshop proceedings might have different agreements! Figure 3 is an example for creating color plates.

2.9. Embedding of Hyperlinks / Typesetting of URLs

Due to the use of the package hyperref the original behavior of the command \url from the package url is not available. To circumvent this problem we either recommend to use the command \httpAddr from the included package egweblnk (see below) or to replace the command \url by the command \webLink - e.g. in cases where \url has been used widely in BibTeX-References. In the latter case we suggest to run BibTeX as usual and then replace all occurences of \url by \webLink

The provided commands for hyperlinks, in a nutshell, are:

```
httpAddr {URL without leading 'http:'}
e.g. http://diglib.eg.org/handle/10.2312/306
httpsAddr {URL without leading 'https:'}
e.g. https://diglib.eg.org/handle/10.2312/306
httpAddr {URL without leading 'ftp:'}
e.g. ftp://www.eg.org/EG/DL/ftpupload
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\URL {url}
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      e.g. http://diglib.eg.org/handle/10.2312/306
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    \MailTo {Email addr}
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      e.g. publishing@eg.org
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    \MailToNA {emailName}{@emailSiteAddress}
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                                                                182
      e.g. publishing@eg.org
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                                                                183
    \webLink{URL without hyperlink creation}
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               http://www.eg.org/some_arbitrary_long/but_
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      useless/URL
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2.10. PDF Generation

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Your final paper should be delivered as a PDF document with all typefaces embedded. LATEX users should use dvips and ps2pdf to create this PDF document. Adobe Acrobat Distiller may be used in place of ps2pdf.

Adobe PDFWriter is not acceptable for use. Documents created with PDFWriter will be returned to the author for revision. pdftex and pdflatex (and its variants) can be used only if the author can make certain that all typefaces are embedded and images are not downsampled or subsampled during the PDF creation pro-

Users with no access to these PDF creation tools should make available a PostScript file and we will make a PDF document from it.

The PDF file *must not* be change protected.

Configuration Notes: dvips / ps2pdf / etc.

dvips should be invoked with the -Ppdf and -G0 flags in order to use Type 1 PostScript typefaces:

```
dvips -t a4 -Ppdf -G0 -o my.ps my.dvi
```

If you are using version 7.x of GhostScript, please use the following method of invoking ps2pdf, in order to embed all typefaces and ensure that images are not downsampled or subsampled in the PDF 205 creation process:

```
ps2pdf -dMaxSubsetPct=100 \
       -dCompatibilityLevel=1.3 \
       -dSubsetFonts=true \
       -dEmbedAllFonts=true \
       -dAutoFilterColorImages=false \
       -dAutoFilterGrayImages=false \
       -dColorImageFilter=/FlateEncode \
       -dGrayImageFilter=/FlateEncode \
       -dMonoImageFilter=/FlateEncode \
       mypaper.ps mypaper.pdf
```

If you are using version 8.x of GhostScript, please use this method in place of the example above:

```
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      ps2pdf -dPDFSETTINGS=/prepress \
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                                                            218
              -dCompatibilityLevel=1.3 \
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                                                            219
173
              -dAutoFilterColorImages=false \
174
              -dAutoFilterGrayImages=false \
              -dColorImageFilter=/FlateEncode \
175
176
              -dGrayImageFilter=/FlateEncode \
              -dMonoImageFilter=/FlateEncode \
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```

Configuration Notes: pdftex / pdflatex / etc.

Configuration of these tools to embed all typefaces can be accomplished by editing the updmap.cfg file to enable inclusion of the standard (or base) 14 typefaces.

-dDownsampleColorImages=false \

-dDownsampleGrayImages=false \

Linux users can run the updmap script to do this:

mypaper.ps mypaper.pdf

```
updmap -setoption pdftexDownloadBase14 true
```

Windows users should edit the updmap.cfg files found in their TeX installation directories (one or both of the following may be present):

```
INSTALLDIR\texmf\web2c\updmap.cfg
INSTALLDIR\localtexmf\miktex\config\updmap.cfg
```

Ensure the value for pdftexDownloadBase14 is "true," and then follow the instructions found here: http://docs.miktex. org/manual/ to update your MikTeX installation.

Configuration Notes: Acrobat Distiller

We recommend to use a Distiller job options file that embeds all typefaces and does not downsample or subsample images when creating the PDF document.

2.11. License Form

You must include your signed Eurographics License Form when you submit your finished paper. We MUST have this form before your paper can be published in the proceedings.

There is a separate workflow for signing licenses for Computer Graphics Forum (regular issues, conference issue, special issues).

2.12. Conclusions

Please direct any questions to the production editor in charge of these proceedings.

References

```
[BFH*98] BUHMANN J. M., FELLNER D. W., HELD M., KETTERER
  J., PUZICHA J.: Dithered color quantization. Computer Graph-
  ics Forum 17, 3 (Sept. 1998), C219-C231. (Proc. Eurographics'98)
  https://diglib.eg.org/handle/10.2312/8491. doi:10.1111/
  1467-8659.00269.2
```

[FH93] FELLNER D. W., HELMBERG C.: Robust rendering of general ellipses and elliptical arcs. ACM TOG 12, 3 (July 1993), 251-276. doi: 10.1145/169711.169704.2

[FvDF*93] FOLEY J. D., VAN DAM A., FEINER S. K., HUGHES J. F., PHILLIPS R.: Introduction to Computer Graphics. Addison-Wesley, 1993. 2

[KSS97] KOBBELT L., STAMMINGER M., SEIDEL H.-P.: Using subdivision on hierarchical data to reconstruct radiosity distribution. Computer Graphics Forum 16, 3 (1997), C347-C355. (Proc. Eurographics'97) https://diglib.eg.org/handle/10.2312/8393. doi:10. 1111/1467-8659.16.3conferenceissue.36.2

```
225 [LFTG97] LAFORTUNE E. P., FOO S.-C., TORRANCE K. E., GREEN-
226 BERG D. P.: Non-linear approximation of reflectance functions. In
227 Proc. SIGGRAPH '97 (1997), vol. 31, pp. 117–126. doi:10.1145/
228 258734.258801.2

229 [Lou90] LOUS Y. L.: Report on the First Eurographics Workshop on
230 Visualization in Scientific Computing. Computer Graphics Forum 9,
231 4 (Dec. 1990), 371–372. doi:10.1111/j.1467-8659.1990.
232 tb00430.x.2
```

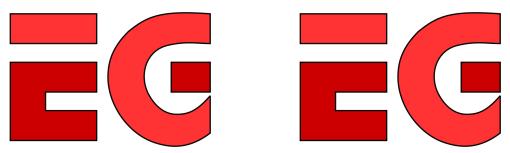


Figure 3: For publications with color tables (i.e., publications not offering color throughout the paper) please **observe**: for the printed version – and ONLY for the printed version – color figures have to be placed in the last page. For the electronic version, which will be converted to PDF before making it available electronically, the color images should be embedded

within the document. Optionally, other multimedia material may be attached to the electronic version.