

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

SUBMISSION ID

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## 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>)

## CCS Concepts

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

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## 1. Introduction

Please follow the steps outlined in this document very carefully when submitting your manuscript to Eurographics.

You may as well use the L<sup>A</sup>T<sub>E</sub>X source as a template to typeset your own paper. In this case we encourage you to also read the L<sup>A</sup>T<sub>E</sub>X comments embedded in the document.

## 2. Instructions

Please read the following carefully.

### 2.1. Language

All manuscripts must be in English.

### 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 (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 current page number and  $n$  the total number of pages of the respective paper.

### 2.3. Formatting your paper

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

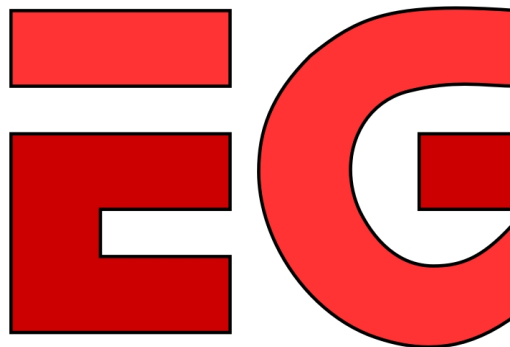
The ABSTRACT is to be in a one-column format. The MAIN TEXT is to be in a two-column format.

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.

**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.



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

**Figure 2:** Here is a sample figure.

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.

## 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-alpha-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

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 millimeters), and then multiply those two values by 12. The resulting

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  $1024 \times 768$  pixel display monitor may be useful in illustrating a concept from your research. In order to be reproduced faithfully, that  $1024 \times 768$  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 egweblink (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 occurrences 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

\ftpAddr {URL without leading 'ftp:'}
e.g. ftp://www.eg.org/EG/DL/ftpupload
```

```

127 \URL {url}
128   e.g. http://diglib.eg.org/handle/10.2312/306
129 \MailTo {Email addr}
130   e.g. publishing@eg.org
131 \MailToNA {emailName}{@emailSiteAddress}
132   e.g. publishing@eg.org
133 \webLink{URL without hyperlink creation}
134   e.g. http://www.eg.org/some\_arbitrary\_long/but\_
135       useless/URL

```

## 136 2.10. PDF Generation

137 Your final paper should be delivered as a PDF document with all  
 138 typefaces embedded. L<sup>A</sup>T<sub>E</sub>X users should use dvips and ps2pdf  
 139 to create this PDF document. Adobe Acrobat Distiller may be used  
 140 in place of ps2pdf.

141 Adobe PDFWriter is *not* acceptable for use. Documents created  
 142 with PDFWriter will be returned to the author for revision. pdf-  
 143 tex and pdflatex (and its variants) can be used only if the au-  
 144 thor can make certain that all typefaces are embedded and images  
 145 are not downsampled or subsampled during the PDF creation pro-  
 146 cess.

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

150 The PDF file *must not* be change protected.

### 151 Configuration Notes: dvips / ps2pdf / etc.

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

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

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

```

159 ps2pdf -dMaxSubsetPct=100 \
160        -dCompatibilityLevel=1.3 \
161        -dSubsetFonts=true \
162        -dEmbedAllFonts=true \
163        -dAutoFilterColorImages=false \
164        -dAutoFilterGrayImages=false \
165        -dColorImageFilter=/FlateEncode \
166        -dGrayImageFilter=/FlateEncode \
167        -dMonoImageFilter=/FlateEncode \
168        mypaper.ps mypaper.pdf

```

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

```

171 ps2pdf -dPDFSETTINGS=/prepress \
172        -dCompatibilityLevel=1.3 \
173        -dAutoFilterColorImages=false \
174        -dAutoFilterGrayImages=false \
175        -dColorImageFilter=/FlateEncode \
176        -dGrayImageFilter=/FlateEncode \
177        -dMonoImageFilter=/FlateEncode \

```

```

178 -dDownsampleColorImages=false \
179 -dDownsampleGrayImages=false \
180 mypaper.ps mypaper.pdf

```

### 181 Configuration Notes: pdftex / pdf latex / etc.

182 Configuration of these tools to embed all typefaces can be accom-  
 183 plished by editing the updmap.cfg file to enable inclusion of the  
 184 standard (or base) 14 typefaces.

185 Linux users can run the updmap script to do this:

```
186 updmap -setoption pdftexDownloadBase14 true
```

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

```

190 INSTALLDIR\texmf\web2c\updmap.cfg
191 INSTALLDIR\localtexmf\miktex\config\updmap.cfg

```

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

### 195 Configuration Notes: Acrobat Distiller

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

## 199 2.11. License Form

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

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

## 205 2.12. Conclusions

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

## 208 References

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- 220 [KSS97] KOBELT L., STAMMINGER M., SEIDEL H.-P.: Using subdi-  
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 222 *puter Graphics Forum* 16, 3 (1997), C347–C355. (Proc. Eurograph-  
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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.  
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**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.