

L^AT_EX Author Guidelines for EUROGRAPHICS Proceedings Manuscripts

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Abstract

ABSTRACT

Categories and Subject Descriptors (according to ACM CCS): I.3.3 [Computer Graphics]: Picture/Image Generation—Line and curve generation

1. Introduction

Being able to deeply understand how the brain is working is one of the main challenges in the last years among neuroscientists. With the advent and the refinement of new technologies like fMRI and diffusion MRI, doctors are able to collect and derive data about how the regions of the brain are connected. Very frequently the map of neural connections of the brain is addressed as CONNECTOME. Visualizing these data in an effective way allows people to navigate and explore all the wired connections that are in the brain. Moreover, thanks to this kind of visualizations is possible to understand better what differences there are between healthy subjects and other people who suffer from a wide range of neuropsychiatric illnesses like bipolar, body dysmorphic disorder, Alzheimer's disease and late-life depression. Many visualization tools have been proposed in the academic literature, however the vast majority of them perform 2D visualizations. However, since this research field is quite novel, there is still room for improvement. The aim of this work is to report and survey the visualizations tools already present in the academic literature as well as to introduce which the new trends for the near future are.

The paper is structured as follows METTI COME IL PAPER E' STRUTTURATO.

2. Instructions

2.1. Language

2.2. Margins and page numbering

Long captions should be set as in Figure ?? or Figure ??.

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.

Figures which need the full textwidth can be typeset as 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.

2.3. 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 [?]. 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. [?]
- **two, three** or **four** authors: first char of each family name plus year – e.g. [?] or [?] or [?]
- **more than 4** authors: first char of family name from first 3 authors followed by a '*' followed by the year – e.g. [?] or [?]

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

2.4. Illustrations, graphs, and photographs

All graphics should be centered.



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

Figure 2: *Here is a sample figure.*

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 1024×768 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.

2.5. 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 ?? is an example for creating color plates.

2.6. 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/EG/DL/WS

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

\URL {url}
e.g. http://www.eg.org/EG/DL/WS

\MailTo {Email addr}
e.g. publishing@eg.org

\MailToNA {emailName}{@emailSiteAddress}
e.g. publishing@eg.org

\webLink{URL without hyperlink creation}
e.g. http://www.eg.org/some\_arbitrary\_long/but\_useless/URL
```

2.7. PDF Generation

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 process.

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 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:

```
ps2pdf -dPDFSETTINGS=/prepress \
       -dCompatibilityLevel=1.3 \
       -dAutoFilterColorImages=false \
       -dAutoFilterGrayImages=false \
       -dColorImageFilter=/FlateEncode \
       -dGrayImageFilter=/FlateEncode \
       -dMonoImageFilter=/FlateEncode \
       -dDownsampleColorImages=false \
       -dDownsampleGrayImages=false \
       mypaper.ps mypaper.pdf
```

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.

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

```
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 download and install the version of the "CMW" Adobe Acrobat Distiller job options file appropriate for your operating system and version of Acrobat from the following URL:

<http://www.cadmusmediaworks.com/index2.html> in the "(Operating System)/Applications/Distiller Settings" folder. The "CMW" job options file embeds all typefaces and does not downsample or subsample images when creating the PDF document.

2.8. Copyright forms

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

2.9. Conclusions

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

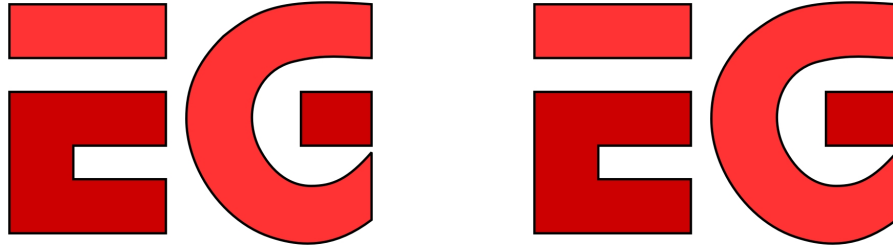


Figure 3: For publications with color tables (i.e., publications not offering color throughout the paper) please **observe**: for the printed version – and **ONLY** for the printed version – color figures have to be placed in the last page. For the electronic version, which will be converted to PDF before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