Author Guidelines for the Advances in Architectural Geometry Conference, Paris 2012

Alexander Schiftner

Evolute and TU Wien

Johannes Wallner

TU Graz and TU Wien

Abstract. *These author guidelines take care of two things: (i) Reviewers should be able to process all submissions in more or less the same way, and they should get an impression on how a paper will look in print. (ii) The accepted papers must be typeset in the same style, and must not contain low quality graphics.*

The submitters are kindly asked to take the detailed instructions into account when preparing their submission, and in particularly when preparing the camera-ready version of their accepted paper. The easiest way to do that is to take the "Word" and "LATEX" versions of this document as a template for their own paper.

1 Introduction

The *Advances in Architectural Geometry* conference welcomes both short and long papers, which are being reviewed by the scientific committee, possibly by additional external reviewers, under the direction of the scientific chairs who make the decision to accept a paper for the AAG12 conference volume. In addition the paper can be invited for a plenary presentation at one of the two conference days; the other accepted papers are invited to present themselves in form of a poster.

The proceedings volume is produced from a camera-ready PDF file provided by the authors, and it is imperative that all papers use the same typefaces, font sizes, style of headings, size of print area, and so on. Therefore we ask you to follow the steps outlined in this document carefully when submitting your final manuscript. It is recommended to follow the guidelines even for the first submission, because the reviewers surely want to know how your paper will look like. You may as well use the LATEX source code or the *Microsoft Word* version of this document as a template to produce your paper.

Submission for reviewing must be done in in PDF format. The organizers are confident that each author has access to software capable of producing PDF files (very often you can simply print your document to create a PDF file). If you honestly believe that you don't, please contact a knowledgeable colleague first, and if this fails, contact the organizers.

2 Instructions

The language of both conference and proceedings is English.

2.1 Margins and page numbering.

Printed material, including text, illustrations, and charts, but excluding the page heading, must be kept within a print area 11.7 cm (4.6 inches) wide by 18.9 cm (7.44 inches) high. The top margin, i.e., the distance between top of the page heading and top of main text, is 12 mm. You can use page numbers for reviewing, but you must not have page numbers for the final version.

2.2 Typefaces 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 (Make sure you use Type-1 fonts or True-Type fonts).

The title should be in Times 14-point, boldface type, and left-justified. 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.

The Author names and affiliations come beneath the title and are printed in Times 10-point (authors in boldface, affiliations non-boldface). Please leave two blank lines between title and authors, a half blank line between author and affiliation, and a blank line between affiliation and the next author.

The abstract should be fully-justified italicized text, below the author and affiliation information. Use the word "Abstract" as the title, in 10-point Times, boldface type, left-aligned to the text, initially capitalized.

The main text is in 10-point Times, single-spaced. Do *not* use double-spacing. All paragraphs should be indented 5 mm. 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 type. Page headings, starting with the second page, consist of the author names on odd pages, and the title on even pages. They are typeset in 9-point Times. Avoid footnotes if possible.[1]

2.3 Section headings.

First and second order headings can be numbered in the style seen here. Please do not number third order headings.

First order headings. They are in 12pt Times, bold-face type. They should be initially capitalized, flush left, with one blank line before, and one blank line after.

Second order headings. They should be 10pt Times, otherwise same as the first order headings.

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[1]they should be typeset in 8-point Times.

Third order headings. If you really need them, they should be typeset in italics, with one blank line before. They are followed by a period and the text.

2.4 Mathematical symbols.

The usual guidelines apply: Symbols which designate a single entity (like *A* for the area, *n* for a number, etc.) should be typeset in italics, especially if they appear in the running text. Centered formulas may be used for emphasis.

$$f(x) = \sin x \Longrightarrow f(90°) = 1.$$

The standard functions (like sin, cos, etc.) are not italicized.

2.5 References.

List all bibliographical references at the end of the paper, in alphabetical order, with author's names in small capitals and book titles, journal names in italics (see the sample bibliography at the end of this text). Referencing is done by author(s) and year enclosed in square brackets: [**?**], [**?**], [**?**].

2.6 Illustrations, graphs, and photographs

The proceedings will be printed in color. Usually 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 1024×768 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.

Make sure that the graphics you include in the paper have not been compressed or downsampled (as is usually the case with JPEG). Most image processing software has a way of specifying the exact amount of compression when saving an image, but the default value usually is too much. If your graphics has sharp edges, you must not use compression below 90%. Otherwise, the compression will be visible in print, such as illustrated by Figure 4b.
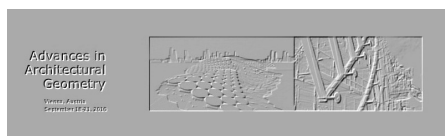

Figure 1: A figure caption can also be located beside the figure (aligned with the bottom of the figure). It is typeset in 9 pt Times.
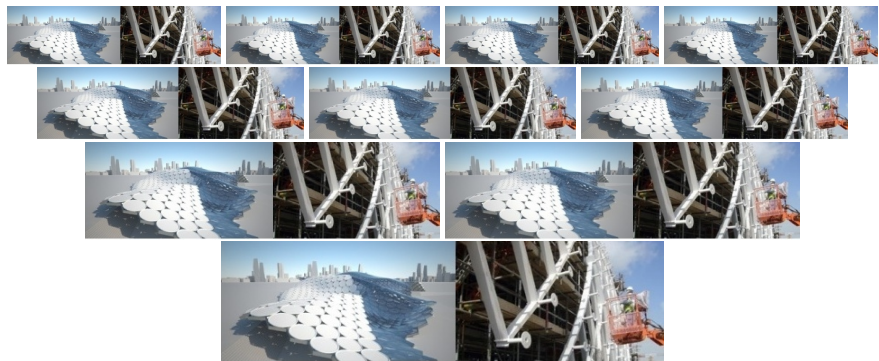
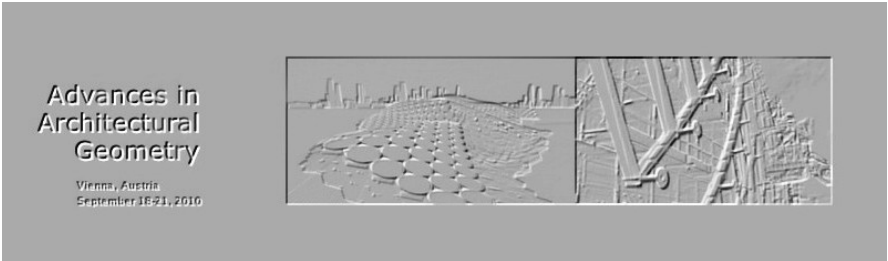Figure 2: Sample figure with short centered caption.

Figure 3: Sample figure with a longer caption which then is typeset in fully justified mode (both left and right). Figure captions should be typeset in 9 point Times. Contrary to the instructions found in this text, the present figure does not have sufficient resolution to be printed this big.
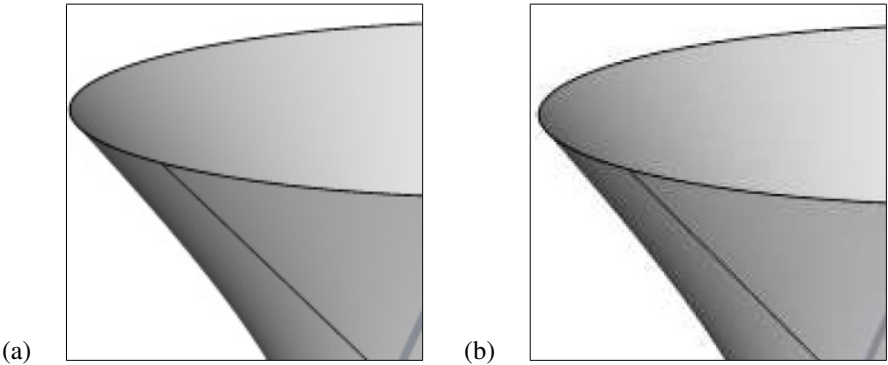

(a)   (b)

Figure 4: Mangnified screenshots of PDF files. *Left:* Correctly assembled PDF file. Only minimal artifacts are visible in areas of high contrast. *Right:* Incorrectly assembled PDF file. Image compression has not been switched off, artifacts are clearly visible. The image is not fit for printing.

2.7 Hyphenation and typesetting of URLs.

Some word processors do hyphenation automatically and some don't. The text becomes prettier if you use hyphens to break long words, because it keeps whitespace between words smaller. For your final accepted paper please introduce hyphens manually if necessary. A notorious problem in this context are URLs (references to the world wide web) which are often treated as a single word.

All URLs should be typeset in italics, like *http://aag12.architecturalgeometry. at*. LATEX users please have a look at the \http macro you find in the template file.

3 Making PDF Files

When accepted, the final paper must be delivered as a PDF document which is not change protected, with all typefaces embedded, and graphics not downsampled/compressed. Different ways to achieve this are in more detail described below.

Note: This part of the guidelines is taken without change from the guidelines for the 2010 conference. The software described below may have newer versions available by now.

3.1 Checking if a PDF file is acceptable.

In order to check if the final PDF file intended for publication is acceptable, please view it in Acrobat Reader, and have a look at the *List of Fonts used in the document* (see security settings / document properties). Each font must be *embedded*, and must be a *Type-1* font or a *True-Type* font.

Zoom in on the graphics and check if they exhibit JPEG artifacts (see Fig. 4). Artifacts either are already contained in your original images or have been introduced by not producing the PDF file properly.

3.2 FreePDF.

This tool is freely available and known to produce acceptable pdfs. It creates a new printer device called "FreePDF" which you can print to from *Microsoft Word* or any other word processor. In order to install and use it please follow this procedure:

• Download the file *gs864w32.exe* from *http://sourceforge.net/projects/ ghostscript/files/* (see the folder GPL Ghostscript / 8.64 on the website). Double-click it and install ghostscript into the default location.

• Download and install *FreePDF 4.02* from *http://freepdfxp.de/xpDownload. html*. When installing, *FreePDF* will find *ghostscript* in its default location.

• Print to the printer *FreePDF*. After printing the graphical user interface of *FreePDF* will pop up. Choose the PDF Profile "High Quality" and click "Edit Configuration". Go to "Profiles", again choose the profile "High Quality" and click "Change". Select "PDF Pictures" and set all image downsampling options to false. Click "Save", close the configuration dialogue, and save the pdf file.

3.3 Using word processors with 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 *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.

3.4 Using TEX and LATEX.

LATEX users can use *dvips* and *ps2pdf* to create a PDF document, where *Adobe Acrobat Distiller* may be used in place of *ps2pdf.* In case you don't have access to either please contact the organizers once your paper is accepted.

First step: Creating a Postscript file. *dvips* should be invoked with the appropriate flags in order to use Type-1 PostScript typefaces (if you do not invoke *dvips* directly from the command line, but by pressing buttons in some editor, make sure to edit your configuration and add the flags there).

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

Second step: Creating a PDF file. 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
```

3.5 Using pdftex/pdflatex.

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. 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 at *http://docs.miktex.org/manual/* to update your MikTeX installation.

4   Upon acceptance

After acceptance of your paper, the publisher requires you to sign a form to the effect that the usual rights are transferred to him, and that you have all necessary rights to include your pictures in the paper. Further you will be notified if the chairs have selected your paper for plenary presentation.

Acknowledgments

We have borrowed shamelessly from the author instructions of Computer graphics conferences and journals, in particular from Eurographics and ACM SIGGRAPH.

Authors' address:

Alexander Schiftner (schiftner@evolute.at): Technische Universität Wien / Wiedner Hauptstr. 8–10/104 — A 1040 Wien, Austria.
Johannes Wallner (j.wallner@tugraz.at): Technische Universität Graz / Kopernikusgasse 24 — A 8010 Graz, Austria.