

IMPORTANT: If you made title or author changes on this camera-ready paper (from the original abstract submission), please notify AHFE Admin immediately with your change(s) to update in the Final Program. Send a message with your submission ID number and the title or author change to: ahfeadmin@ahfe.org

Author Guidelines for the Preparation of Contributions to Springer Computer Science Proceedings

Alfred Hofmann^{1*}, Brigitte Apfel¹, Ursula Barth¹, Christine Günther¹,
Ingrid Haas¹, Frank Holzwarth¹, Anna Kramer¹, Leonie Kunz¹,
Nicole Sator¹, Erika Siebert-Cole¹ and Peter Straßer¹

¹ Springer-Verlag, Computer Science Editorial, Tiergartenstr. 17,
69121 Heidelberg, Germany

{Alfred.Hofmann, Brigitte.Apfel, Ursula.Barth, Christine.Guenther,
Ingrid.Haas, Frank.Holzwarth, Anna.Kramer, Leonie.Kunz,
Nicole.Sator, Erika.Siebert-Cole, Peter.Strasser, LNCS}@Springer.com

Abstract. The abstract should summarize the contents of the paper and should contain at least 70 and at most 150 words. It should be set in 9-point font size and should be inset 1.0 cm from the right and left margins. There should be two blank (10-point) lines before and after the abstract. This document is in the required format.

Keywords: We would like to encourage you to list your keywords in this section separated by middots (·), for example: Human Factors · Human-systems Integration · Systems engineering

1 Introduction

This is an example paper and template to duplicate exactly with respect to the required format of your paper. Please duplicate the style (fonts, font sizes, spacing, headings, reference style, etc.) of your paper using this example. **Do not put your title in caps (prepare exactly as shown above)**. Center your title, name, and affiliation information (do not use titles, such as Ph.D., Prof., etc.)

Kindly submit the final and checked Word and PDF files of your paper to the AHFE 2020 submission system. When submitting your paper, name your word document and PDF file using the following file name format:

“PrimaryAuthorLastName_FirstName_PaperID.doc”. Your paper along with the signed copyright agreement form must be submitted by February 1, 2020 to AHFE 2020 submission system: <https://www.ahfe-cms.org>

* Please note that the LNCS Editorial assumes that all authors have used the western naming convention, with given names preceding surnames (first name then last name). This determines the structure of the names in the running heads and the author index. No academic titles or descriptions of academic positions should be included in the addresses. The affiliations should consist of the author’s institution, town, and country.

If you made title or author changes on this camera-ready paper (from the original abstract submission), please notify AHFE Admin immediately with your change(s) to update in the Final Program. Send a message with your submission ID number and the title or author change to: ahfeadmin@ahfe.org

You should make sure that the submitted Word and the PDF files are identical and correct and that only one version of your paper is sent. It is not possible to update files at a later stage. Please note that we do not need the printed paper.

We would like to draw your attention to the fact that it is not possible to modify a paper in any way, once it has been published. This applies to both the printed book and the online version of the publication. Every detail, including the order of the names of the authors, should be checked before the paper is sent to the Volume Editors.

2 Paper Preparation

The printing area is 122 mm × 193 mm (4.8 inches × 7.6 inches). The text should be justified to occupy the full line width, so that the right margin is not ragged, with words hyphenated as appropriate. Please fill pages so that the length of the text is no less than 180 mm, if possible. Use paper size A4 210 mm × 297 mm (8.27 inches × 11.69 inches), Top and Bottom margins: 52.1 mm, Left and Right margins: 43.9 mm (Top and Bottom margins: 2.05 inches, Left and Right margins: 1.73 inches).

Use 10-point type for the name(s) of the author(s) and 9-point type for the address(es) and the abstract. For the main text, please use 10-point type and single-line spacing. We recommend the use of Computer Modern Roman or Times. Italic type may be used to emphasize words in running text. Bold type and underlining should be avoided. **The recommended page size of full papers is 6 pages, with minimum of 5 pages and a maximum of 7 pages**, including all paper components such as references, appendices, acknowledgements, ... etc. **Papers over 7 pages of length will not be included in the Conference Proceedings.**

Papers not complying with the LNCS style will not be considered or delayed. This can lead to an increase in the overall number of pages. We would therefore urge you not to squash your paper.

Headings. Headings should be capitalized (i.e., nouns, verbs, and all other words except articles, prepositions, and conjunctions should be set with an initial capital) and should, with the exception of the title, be aligned to the left. Words joined by a hyphen are subject to a special rule. If the first word can stand alone, the second word should be capitalized. The font sizes are given in Table 1.

Here are some examples of headings: "Criteria to Disprove Context-Freeness of Collage Languages", "On Correcting the Intrusion of Tracing Non-deterministic Programs by Software", "A User-Friendly and Extendable Data Distribution System", "Multi-flip Networks: Parallelizing GenSAT", "Self-determinations of Man".

Table 1. Font sizes of headings. Table captions should always be positioned *above* the tables.

Heading level	Example	Font size and style
Title (centered)	Lecture Notes ...	14 point, bold
1 st -level heading	1 Introduction	12 point, bold
2 nd -level heading	2.1 Printing Area	10 point, bold
3 rd -level heading	Headings. Text follows ...	10 point, bold
4 th -level heading	<i>Remark.</i> Text follows ...	10 point, italic

Lemmas, Propositions, and Theorems. The numbers accorded to lemmas, propositions, and theorems, etc. should appear in consecutive order, starting with Lemma 1, and not, for example, with Lemma 11.

2.1 Figures

Please check that the lines in line drawings are not interrupted and have a constant width. Grids and details within the figures must be clearly legible and may not be written one on top of the other. Line drawings should have a resolution of at least 800 dpi (preferably 1200 dpi). The lettering in figures should have a height of 2 mm (10-point type). Figures should be numbered and should have a caption which should always be positioned *under* the figures, in contrast to the caption belonging to a table, which should always appear *above* the table. Please center the captions between the margins and set them in 9-point type (Fig. 1 shows an example). The distance between text and figure should be about 8 mm, the distance between figure and caption about 6 mm.

To ensure that the reproduction of your illustrations is of a reasonable quality, we advise against the use of shading. The contrast should be as pronounced as possible. If screenshots are necessary, please make sure that you are happy with the print quality before you send the files.

Remark 1. In the printed volumes, illustrations are generally black and white (half-tones), and only in exceptional cases, and if the author is prepared to cover the extra costs involved, are colored pictures accepted. Colored pictures are welcome in the electronic version free of charge. If you send colored figures that are to be printed in black and white, please make sure that they really are legible in black and white. Some colors show up very poorly when printed in black and white.

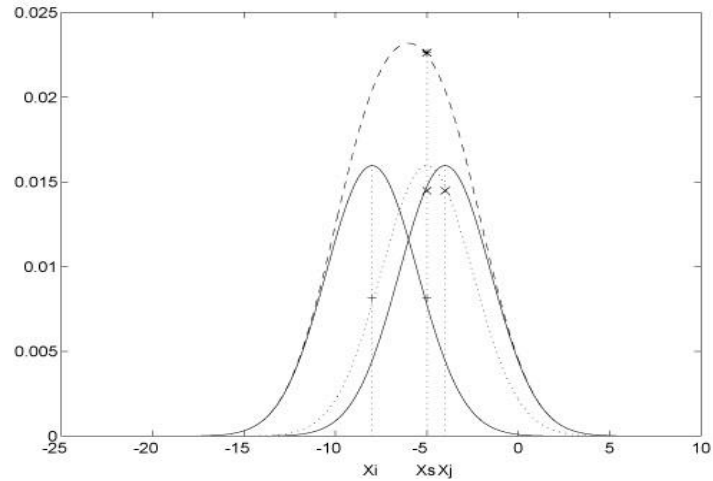


Fig. 1. One kernel at x_s (*dotted kernel*) or two kernels at x_i and x_j (*left and right*) lead to the same summed estimate at x_s . This shows a figure consisting of different types of lines. Elements of the figure described in the caption should be set in italics, in parentheses, as shown in this sample caption.

2.2 Formulas

Displayed equations or formulas are centered and set on a separate line (with an extra line or halfline space above and below). Displayed expressions should be numbered for reference. The numbers should be consecutive within each section or within the contribution, with numbers enclosed in parentheses and set on the right margin.

$$x + y = z . \tag{1}$$

Equations should be punctuated in the same way as ordinary text but with a small space before the end punctuation mark.

2.3 Footnotes

The superscript numeral used to refer to a footnote appears in the text either directly after the word to be discussed or – in relation to a phrase or a sentence – following the punctuation mark (comma, semicolon, or period). Footnotes should appear at the bottom of the normal text area, with a line of about 5cm set immediately above them².

² The footnote numeral is set flush left and the text follows with the usual word spacing.

2.4 Program Code

Program listings or program commands in the text are normally set in typewriter font, e.g., CMTT10 or Courier.

Example of a Computer Program from Jensen K., Wirth N. (1991) Pascal user manual and report. Springer, New York

```
program Inflation (Output)
  {Assuming annual inflation rates of 7%, 8%, and
  10%,...  years};
  const  MaxYears = 10;
  var    Year: 0..MaxYears;
         Factor1, Factor2, Factor3: Real;
begin
  Year := 0;
  Factor1 := 1.0; Factor2 := 1.0; Factor3 := 1.0;
  WriteLn('Year 7% 8% 10%'); WriteLn;
  repeat
    Year := Year + 1;
    Factor1 := Factor1 * 1.07;
    Factor2 := Factor2 * 1.08;
    Factor3 := Factor3 * 1.10;
    WriteLn(Year:5,Factor1:7:3,Factor2:7:3,
            Factor3:7:3)
  until Year = MaxYears
end.
```

2.5 Citations

For citations in the text please use square brackets and consecutive numbers: [1], [2], [3], etc.

2.6 Page Numbering and Running Heads

There is no need to include page numbers. If your paper title is too long to serve as a running head, it will be shortened. Your suggestion as to how to shorten it would be most welcome.

3 LNCS Online

The online version of the volume will be available in LNCS Online. Members of institutes subscribing to the Lecture Notes in Computer Science series have access to all the pdfs of all the online publications. Non-subscribers can only read as far as the abstracts. If they try to go beyond this point, they are automatically asked, whether they would like to order the pdf, and are given instructions as to how to do so.

Please note that, if your email address is given in your paper, it will also be included in the meta data of the online version.

4 BibTeX Entries

The correct BibTeX entries for the Lecture Notes in Computer Science volumes can be found at the following Website shortly after the publication of the book: <http://www.informatik.uni-trier.de/~ley/db/journals/lncs.html>

Acknowledgments. The heading should be treated as a 3rd level heading and should not be assigned a number.

5 The References Section

In order to permit cross referencing within LNCS-Online, and eventually between different publishers and their online databases, LNCS will, from now on, be standardizing the format of the references. This new feature will increase the visibility of publications and facilitate academic research considerably. Please base your references on the examples below. References that don't adhere to this style will be reformatted by Springer. You should therefore check your references thoroughly when you receive the final pdf of your paper. The reference section must be complete. You may not omit references. Instructions as to where to find a fuller version of the references are not permissible.

We only accept references written using the latin alphabet. If the title of the book you are referring to is in Russian or Chinese, then please write (in Russian) or (in Chinese) at the end of the transcript or translation of the title.

The following section shows a sample reference list with entries for journal articles [1], an LNCS chapter [2], a book [3], proceedings without editors [4] and [5], as well as a URL [6]. Please note that proceedings published in LNCS are not cited with their full titles, but with their acronyms!

References

1. Smith, T.F., Waterman, M.S.: Identification of Common Molecular Subsequences. *J. Mol. Biol.* 147, 195--197 (1981)
2. May, P., Ehrlich, H.C., Steinke, T.: ZIB Structure Prediction Pipeline: Composing a Complex Biological Workflow through Web Services. In: Nagel, W.E., Walter, W.V., Lehner, W. (eds.) *Euro-Par 2006*. LNCS, vol. 4128, pp. 1148--1158. Springer, Heidelberg (2006)
3. Foster, I., Kesselman, C.: *The Grid: Blueprint for a New Computing Infrastructure*. Morgan Kaufmann, San Francisco (1999)
4. Czajkowski, K., Fitzgerald, S., Foster, I., Kesselman, C.: Grid Information Services for Distributed Resource Sharing. In: 10th IEEE International Symposium on High Performance Distributed Computing, pp. 181--184. IEEE Press, New York (2001)
5. Foster, I., Kesselman, C., Nick, J., Tuecke, S.: *The Physiology of the Grid: an Open Grid Services Architecture for Distributed Systems Integration*. Technical report, Global Grid Forum (2002)
6. National Center for Biotechnology Information, <http://www.ncbi.nlm.nih.gov>

Appendix: Springer-Author Discount

LNCS authors are entitled to a 33.3% discount off all Springer publications. Before placing an order, they should send an email to orders-HD-individuals@springer.com, giving full details of their Springer publication, to obtain a so-called token. This token is a number, which must be entered when placing an order via the Internet, in order to obtain the discount.

Checklist of Items to be Sent to Volume Editors

1. A final Word file
2. A final PDF file
3. A copyright form, signed by one author on behalf of all of the authors of the paper

Checking the PDF File

Kindly assure that the Contact Volume Editor is given the name and email address of the contact author for your paper. The Contact Volume Editor uses these details to compile a list for our production department at SPS in India. Once the files have been worked upon, SPS sends a copy of the final pdf of each paper to its contact author. The contact author is asked to check through the final pdf to make sure that no errors have crept in during the transfer or preparation of the files. This should not be seen as an opportunity to update or copyedit the papers, which is not possible due to time constraints. Only errors introduced during the preparation of the files will be corrected.

This round of checking takes place about two weeks after the files have been sent to the Editorial by the Contact Volume Editor, i.e., roughly seven weeks before the start of the conference for conference proceedings, or seven weeks before the volume leaves the printer's, for post-proceedings. If SPS does not receive a reply from a particular contact author, within the timeframe given, then it is presumed that the author has found no errors in the paper. The tight publication schedule of LNCS does not allow SPS to send reminders or search for alternative email addresses on the Internet. In some cases, it is the Contact Volume Editor that checks all the pdfs. In such cases, the authors are not involved in the checking phase.

Additional Information Required by the Volume Editor

If you have more than one surname, please make sure that the Volume Editor knows how you are to be listed in the author index.

Copyright Forms

The copyright form may be downloaded from the AHFE 2020 website:
<http://www.ahfe2020.org/submission.html>

Please upload your signed copyright form to the submission system during full paper submission as a scanned pdf. Consent to Publish (copyright form) File Name Format: “ Consent_AuthorLastName_FirstName_PaperID.pdf ”

One author may sign on behalf of all of the other authors of a particular paper. Digital signatures are acceptable.

Submission Instructions

Follow the Full Paper Preparation instructions found on this example paper **Exactly** to avoid delays. Papers formatted improperly will be returned to the author(s).

Login to the [AHFE 2020 submission system](#) and upload the following three files:

1. **Final proofread paper** (MS Word in DOC or DOCX, including all figures and tables). File Name Format should be: [PrimaryAuthorLastName_FirstName_PaperID.DOC]
2. **Final PDF file corresponding exactly to the final paper**. File Name Format should be: [PrimaryAuthorLastName_FirstName_PaperID.PDF]
3. **A scanned copy of a filled in and signed Springer Copyright Form** (PDF file). Modified forms are not acceptable. File Name Format should be: [Consent_PrimaryAuthorLastName_FirstName_PaperID.PDF]

Note: One author may sign on behalf of all of the other authors of a particular paper. Please note that the field "Volume Editor" should be left blank.