

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

Alfred Hofmann^{1,*}, Ralf Gerstner¹, Anna Kramer¹, and Frank Holzwarth²

¹ Springer-Verlag, Computer Science Editorial, Heidelberg, Germany
{alfred.hofmann,ralf.gerstner,anna.kramer}@springer.com

² Springer-Verlag, Technical Support, Heidelberg, Germany
frank.holzwarth@springer.com

Abstract. The abstract is a mandatory element that should summarize the contents of the paper and should contain at least 70 and at most 150 words. Abstract and keywords are freely available in SpringerLink.

Keywords: We would like to encourage you to list your keywords here. They should be separated by commas.

1 Introduction

You will find here Springer's guidelines for the preparation of proceedings papers to be published in one of the following series, in printed and electronic form:

- Lecture Notes in Computer Science (LNCS), incl. its subseries Lecture Notes in Artificial Intelligence (LNAI) and Lecture Notes in Bioinformatics (LNBI), and LNCS Transactions;
- Lecture Notes in Business Information Processing (LNBIP);
- Communications in Computer and Information Science (CCIS);
- Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST);
- IFIP Advances in Information and Communication Technology (IFIP AICT), formerly known as the IFIP Series;
- Proceedings in Information and Communication Technology (PICT).

Your contribution may be prepared in LaTeX or Microsoft Word. Technical Instructions for working with Springer's style files and templates are provided in separate documents which can be found in the respective zip packages on our website.

* No academic titles or descriptions of academic positions should be included in the addresses. Either this information should be omitted altogether (preferably), or it should be included in a footnote at the end of the first page. Information of this nature, given in the addresses, will be deleted by our typesetters.

2 Preparation of Your Paper

2.1 Structuring Your Paper

Affiliations. The affiliated institutions are to be listed directly below the names of the authors. Multiple affiliations should be marked with superscript arabic numbers, and they should each start on a new line as shown in this document. In addition to the name of your affiliation, we would ask you to give the town and the country in which it is situated. If you prefer to include the entire postal address, then please feel free to do so. E-mail addresses should start on a new line and should be grouped per affiliation.

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. Only the first two levels of section headings should be numbered, as shown in Table 1. The respective font sizes are also given in Table 1. Kindly refrain from using “0” when numbering your section headings.

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	Run-in Heading in Bold. Text follows	10 point, bold
4 th -level heading	<i>Lowest Level Heading.</i> Text follows	10 point, italic

Words joined by a hyphen are subject to a special rule. If the first word can stand alone, the second word should be capitalized.

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”.

Lemmas, Propositions, and Theorems. The numbers accorded to lemmas, propositions, and theorems, etc. should appear in consecutive order, starting with Lemma 1. Please do not include section counters in the numbering like “Theorem 1.1”.

2.2 Page Numbering and Running Heads

There is no need to include page numbers or running heads; this will be done at our end. 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.

2.3 Figures and Tables

It is essential that all illustrations are as clear and as legible as possible. Vector graphics – instead of rasterized images – should be used for diagrams and schemas whenever possible. 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 are to have a resolution of at least 800 dpi (preferably 1200 dpi). The lettering in figures should not use font sizes

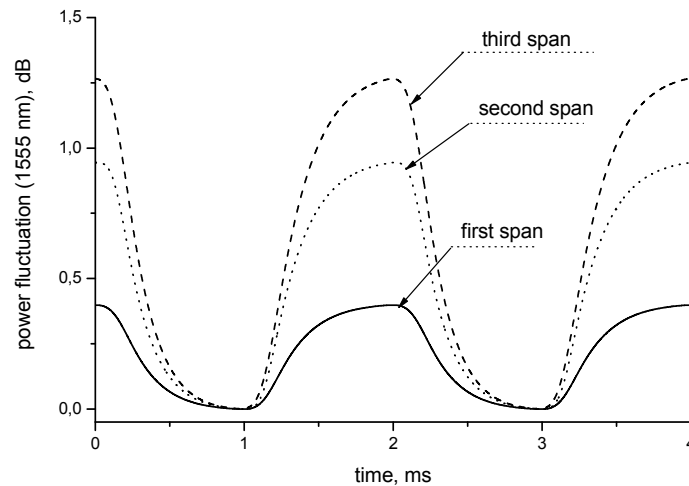


Fig. 1. Power distribution of channel at 1555 nm along the link of 383 km (Source: LNCS 5412, p. 323)

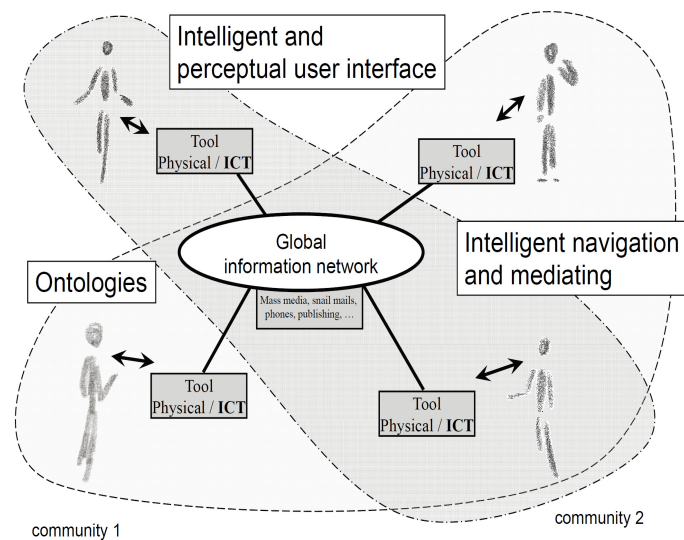


Fig. 2. Artifacts empowered by Artificial Intelligence (Source: LNCS 5640, p. 115)

smaller than 6 pt (~ 2 mm character height). Figures are to be numbered and to 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.

Captions are set in 9-point type. If they are short, they are centered between the margins. Longer captions, covering more than one line, are justified (Fig. 1 and Fig. 2 show examples). Captions that do not constitute a full sentence, do not have a period.

Text fragments of fewer than four lines should not appear at the tops or bottoms of pages, following a table or figure. In such cases, it is better to set the figures right at the top or right at the bottom of the page. A figure should never be placed in the middle of a paragraph.

If screenshots are necessary, please make sure that the essential content is clear to the reader.

Remark 1. In the printed volumes, illustrations are generally black and white (half-tones), and only in exceptional cases, and if the author or the conference organization 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 also legible in black and white. Some colors show up very poorly when printed in black and white.

2.4 Formulas

Displayed equations or formulas are centered and set on a separate line (with an extra line or half line space above and below). Displayed expressions should be numbered for reference. The numbers should be consecutive within the contribution, with numbers enclosed in parentheses and set on the right margin. Please do not include section counters in the numbering.

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

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

2.5 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).¹

For remarks pertaining to the title or the authors' names, in the header of a paper, symbols should be used instead of a number (see first page of this document). Please note that no footnotes may be included in the abstract.

¹ The footnote numeral is set flush left and the text follows with the usual word spacing.

2.6 Program Code

Program listings or program commands in the text are normally set in typewriter font:

```

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.

```

[Example of a computer program from Jensen K., Wirth N.: Pascal User Manual and Report. Springer, New York (1991)]

2.7 Citations and Bibliography

For citations in the text, we prefer the use of square brackets and consecutive numbers. Numbers should be grouped where appropriate. We would write [1-5] but [1], [3], [5], etc. The numbers in the bibliography section are without square brackets. Citations using labels or the author/year convention are also acceptable.

Please write all references using the latin alphabet. If the title of the book you are referring to is, e.g., in Russian or Chinese, then please write (in Russian) or (in Chinese) at the end of the transcript or translation of the title.

In order to permit cross referencing within www.springerlink.com, and eventually between different publishers and their online databases, Springer standardizes the format of the references. This feature aims to increase the visibility of publications and facilitate academic research. Please base your references on the examples given in the references section of these instructions. References that do not adhere to this style will be reformatted at our end.

We would like to draw your attention to the fact that references to LNCS proceedings papers are particularly often reformatted due to missing editor names or incomplete publisher information. This adjustment may result in the final papers as published by Springer having more pages than the original versions as submitted by the authors. Here is an example:

Reference as formatted in author's original version:

Assemlal, H.E., Tschumperlé, D., Brun, L.: Efficient Computation of PDF-Based Characteristics from Diffusion MR Signal. In: MICCAI. Volume 5242. (2008) 70–78

Reference after reformatting by Springer:

Assemlal, H.E., Tschumperlé, D., Brun, L.: Efficient Computation of PDF-Based Characteristics from Diffusion MR Signal. In: Metaxas, D., Axel, L., Fichtinger, G., Székely, G. (eds.) MICCAI 2008, Part II. LNCS, vol. 5242, pp. 70–78. Springer, Heidelberg (2008)

One more line is needed for this reference, as a result of Springer's adjustment.

Please make sure that all your sources are correctly listed in the reference section. Do not include references to pieces of work that are not connected with your paper.

The references section at the end of this paper 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 Springer proceedings are cited with their publication acronyms and volume numbers.

2.8 Plagiarism

Springer takes plagiarism seriously. If an author has copied from another author or has used parts of another author's work, without his or her permission and a reference, then the paper on SpringerLink will be given a "retracted" stamp, and an erratum explaining the reasons for the retraction will be included. In addition, the volume editors and the author's academic supervisors will be informed.

Acknowledgements. This should always be a run-in heading and not a section or subsection heading. It should not be assigned a number. The acknowledgements may include reference to grants or supports received in relation to the work presented in the paper.

3 Additional Information Required from Authors

3.1 Copyright Form

There are different copyright forms in place for the different Springer Computer Science proceedings book series. A prefilled copyright form is usually available from the conference website. Alternatively, the form may be downloaded from the webpage of the respective series on www.springer.com. Please send your signed copyright form to your conference publication contact, either as a scanned PDF or by fax or by courier. One author may sign on behalf of all of the other authors of a particular paper. In this case, the author signs for and accepts responsibility for releasing this material on behalf of any and all co-authors. Digital signatures are not acceptable.

3.2 Contact Author Information

Kindly assure that, when you submit the final version of your paper, you also provide the name and e-mail address of the contact author for your paper. These details are used to compile a list of contact authors for our typesetting partners SPS in India. The contact author must be available to check the paper roughly seven weeks before the start of the conference, or before the book is due to leave the printing office, in the case of post-conference proceedings. He or she will be contacted by SPS from the following e-mail address: `typesetting@sps.co.in`.

3.3 Correct Representation of Author Names

Authors' names should be written out in full at the tops of the papers. They are shortened by us to "initials surname" in the running heads and will take the form "surname, given name" in the author index. If you or any of your co-authors have more than one family name, it should be made quite clear how your name is to be displayed in the running heads and the author index. Chinese authors should write their given names in front of their surnames at the tops of their papers. If you only have one (main) name, please make sure that this name is written out in full in the running heads, when you check your final PDF.

4 Typesetting of Your Paper at Springer

Please make sure that the paper you submit is final and complete, that any copyright issues have been resolved, that the authors listed at the top of the chapter really are the final authors, and that you have not omitted any references. Following publication, it is not possible to alter your paper on SpringerLink. Kindly note that we prefer the use of American English.

4.1 What Will Be Done with Your Paper

If the instructions have been followed closely, then only very minor alterations will be made to your paper. The production team at SPS checks the format of the paper, and if, for example, vertical spacing has been inserted or removed, making the paper unsightly or difficult to read, then this is remedied. In addition, running-heads, final page numbers and a copyright line are inserted, and the capitalization of the headings is checked and corrected if need be. Finally, the reference section is attuned to our specifications (see also Section 2.7).

4.2 Proof Reading Stage

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 paper, which is not possible due to time constraints. Only errors introduced during the preparation of the files will be corrected. Particular attention should be paid to the references section.

If SPS does not receive a reply from a particular contact author, within the time-frame given (usually 72 hours), then it is presumed that the author has found no errors in the paper. The tight publication schedule of our proceedings series does not allow SPS to send reminders or search for alternative e-mail addresses on the Internet.

In some cases, it is the contact volume editor or the publication chair who checks all of the PDFs. In such cases, the authors are not involved in the checking phase.

The purpose of the proof is to check for typesetting or conversion errors and the completeness and accuracy of the text, tables and figures. Substantial changes in content, e.g., new results, corrected values, title and authorship, are not possible and cannot be processed.

5 Online Publication in SpringerLink

All papers will be published in our digital library www.springerlink.com. Only subscribers to Springer's eBook packages or to the electronic book series are able to access the full text PDFs and references of our online publications. Meta-data, abstracts and author e-mail addresses are freely available for all users.

6 Checklist of Items to Be Sent to Volume Editor

- The final source files, incl. any non-standard fonts.
- A final PDF file corresponding exactly to the final source files.
- A copyright form, signed by one author on behalf of all of the authors of the paper.
- The name and e-mail address of the contact author who will check the proof of the paper.
- A suggestion for an abbreviated running head, if appropriate.
- Information about correct representation of authors' names, where necessary.

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

Authors contributing to any of Springer's computer science proceedings publications are entitled to a 33.3% discount off all Springer products when placing an order through www.springer.com. Please go to www.springer.com/authors, then click on 'Book Authors' and then follow the instructions given in the Book Discounts section. You are requested to give full details of your Springer publication to obtain a so-called SpringerToken. This token is a number that must be entered when placing an order through our online catalogue, in order to obtain the discount.

Contact Us

If you have any further questions regarding the preparation of your paper, then please do not hesitate to get in touch with us.

- For all questions related to our LaTeX style files, your contact person is: Mr. Frank Holzwarth, e-mail: frank.holzwarth@springer.com.
- For overall technical questions concerning the preparation of LNCS/LNAI/LNBI papers, please contact Ms. Anna Kramer, e-mail: lncs@springer.com.
- For the LNBIP series, please contact Ms. Viktoria Meyer, e-mail: lnbip@springer.com.
- For the CCIS series, please contact Ms. Leonie Kunz, e-mail: ccis@springer.com.
- For the LNICST series, please contact Mr. Peter Strasser, e-mail: lnicst@springer.com.
- For the IFIP AICT series, please contact Ms. Erika Siebert-Cole, e-mail: ifip@springer.com.

[January 25, 2013]