

KU LEUVEN



**RESEARCH CENTRE FOR
INFORMATION SYSTEMS
ENGINEERING (LIRIS)**

Type your title here

Name 1
Student number 1

Name 2
Student number 2

Name 3
Student number 3

**Thesis submitted to obtain
the degree of**

Business and Information Systems Engineering
Major Data science

Promoter: Prof. Dr. ...
Daily Supervisor: ...

Academic year: 20XX-20XX

Abstract. The abstract should briefly summarize the contents of the paper in 150–250 words.

Keywords: First keyword · Second keyword · Another keyword.

Acknowledgement. Place your acknowledgements here.
We would like to thank ...

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Introduction

Introduce your topic by discussing the field of research, recent changes that the field has experienced, and identify the gap that you will address. State the problem you will address, and the research questions this paper will answer. Lastly, provide an outline of the rest of the thesis.

This template is based on the Lecture Notes of Computer Science (LNCS) template by Springer [4]. The template is structured as follows: `main.tex` contains the structure of the template. Here, packages can be added, titles can be changed, etc. The content of the template can be found in the folder 'Content'. This folder contains a `tex` file for each chapter, where the text can be placed. Further, the template contains the bibliography in `mybibliography.bib` which is a `bibtex` file where bibliography entries can be added. These entries can then be referenced to throughout the paper with the command `\cite{}`, which will trigger the *References* section (see section 5) upon compilation of the project. Figures can be added to the project in different file formats, examples are `fig1.eps` and `Logo.png`. Lastly, five files from the LNCS template are included, `readme.txt` describes these files. It is recommended to read the manual (`11ncs.pdf`) before you start using this template.

1 Literature Review

Critically discuss related work. Make connections between relevant articles by contrasting them, or discussing the similarities.¹

1.1 A Subsection Sample

Please note that the first paragraph of a section or subsection is not indented. The first paragraph that follows a table, figure, equation etc. does not need an indent, either.

Subsequent paragraphs, however, are indented.

Sample Heading (Third Level) Only two levels of headings should be numbered. Lower level headings remain unnumbered; they are formatted as run-in headings.

Sample Heading (Fourth Level) The contribution should contain no more than four levels of headings. Table 1 gives a summary of all heading levels.

Table 1. Table captions should be placed above the tables.

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

Displayed equations are centered and set on a separate line.

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

Please try to avoid rasterized images for line-art diagrams and schemas. Whenever possible, use vector graphics instead (see Fig. 1).

Proof. Proofs, examples, and remarks have the initial word in italics, while the following text appears in normal font.

¹ The contents of this section is based on the LNCS template [4]

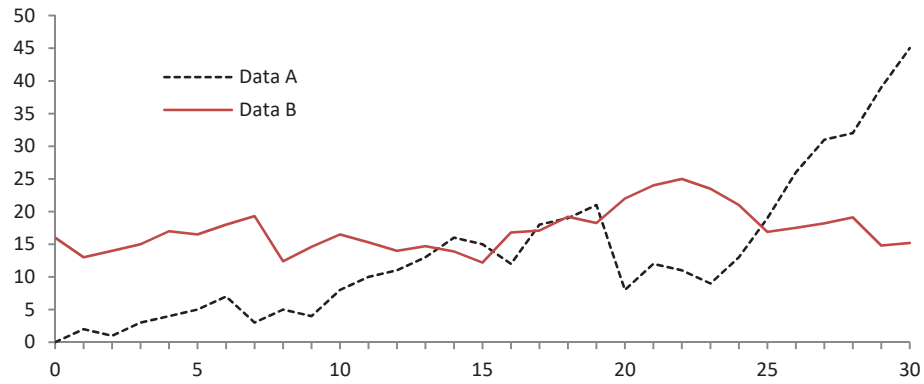


Fig. 1. A figure caption is always placed below the illustration. Please note that short captions are centered, while long ones are justified by the macro package automatically.

For citations of references, we prefer the use of square brackets and consecutive numbers. Citations using labels or the author/year convention are also acceptable. The following bibliography provides a sample reference list with entries for journal articles [2], an LNCS chapter [3] and a homepage [1]. Multiple citations are grouped [2,3], [2,1].

2 Methodology

Discuss the methods that you will use for the analysis of the thesis.

3 Results

Present the results of your analysis here.

4 Discussion

Discuss the results of your analysis here.

5 Critical Reflection

Critically reflect on your analysis and the results. Discuss the limitations of your analysis, the impact these limitations have on your results and provide solutions.

Conclusion

Place the conclusion here. Summarize the methodology, results and the main takeaways.

Appendix

List of Figures

- 1 A figure caption is always placed below the illustration.
Please note that short captions are centered, while long
ones are justified by the macro package automatically. 7

List of Tables

1	Table captions should be placed above the tables.	6
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References

- [1] Lncs homepage, <http://www.springer.com/lncs>
- [2] Author, F.: Article title. *Journal* **2**, 99–110 (2016)
- [3] Author, F., Author, S.: Title of a proceedings paper. In: *Journal*. vol. 2, pp. 1–13. Springer, Heidelberg (2016). <https://doi.org/10.1007/1234567890>
- [4] Springer: Conference proceedings guidelines: Springer (2022), <https://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines>