

Clemens Damke

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Bachelorarbeit

Probabilistische online Wissensgraphkonstruktion aus natürlicher Sprache

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October 4, 2015

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Reviewers: Jane Doe and John Doe

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Intelligent Systems Group (ISG)
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Abstract

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Abstract (different language)

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Acknowledgement

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Introduction

You can't do better design with a computer, but you can speed up your work enormously.

— Wim Crouwel (Graphic designer and typographer)

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1.1 Postcards: My Address

Ricardo Langner Alfred-Schrapel-Str. 7 01307 Dresden Germany

1.2 Motivation and Problem Statement

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[Jür00; Jür95; Mie11a; KJ11; App10a; App10b; App10c]

1.3 Results

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1.3.1 Some References

[Fre10; Mie11b]

1.4 Thesis Structure

Chapter 2

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Chapter 3

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Chapter 4

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Chapter 4

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Related Work

A picture is worth a thousand words. An interface is worth a thousand pictures.

— Ben Shneiderman

(Professor for Computer Science)

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2.1 Related Work Section 1

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2.2 Related Work Section 2

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2.3 Related Work Section 3

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2.4 Conclusion

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System 3

Innovation distinguishes between a leader and a follower.

— Steve Jobs
(CEO Apple Inc.)

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3.1 System Section 1

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Fig. 3.1.: Figure example: (a) example part one, (c) example part two; (c) example part three

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3.2 System Section 2

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Fig. 3.2.: Another Figure example: (a) example part one, (c) example part two; (c) example part three

And after the second paragraph follows the third paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift - not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

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3.3 System Section 3

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3.4 Conclusion

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4

Concepts: This text is here to test a very long title, to simulate the line break behavior, to show that an extremely long tilte also works

Users do not care about what is inside the box, as long as the box does what they need done.

— **Jef Raskin** about Human Computer Interfaces

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4.1 Concepts Section 1

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4.2 Concepts Section 2

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4.4 Conclusion

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5.1 System Section 1

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5.2 System Section 2

After this fourth paragraph, we start a new paragraph sequence. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift - not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

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5.3 Future Work

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Example Appendix

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A.1 Appendix Section 1

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Alpha	Beta	Gamma
0	1	2
3	4	5

Tab. A.1.: This is a caption text.

A.2 Appendix Section 2

And after the second paragraph follows the third paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information

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Alpha	Beta	Gamma
0	1	2
3	4	5

Tab. A.2.: This is a caption text.

After this fourth paragraph, we start a new paragraph sequence. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift - not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift - not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Bibliography

- [App10a] Apple Inc. Keynote '09 User Guide. Apple Inc., 2010 (cit. on p. 3).
- [App10b] Apple Inc. Numbers '09 User Guide. Apple Inc., 2010 (cit. on p. 3).
- [App10c] Apple Inc. Pages '09 User Guide. Apple Inc., 2010 (cit. on p. 3).
- [Jür00] Manuela Jürgens. *LaTeX: eine Einführung und ein bisschen mehr*. FernUniversität Gesamthochschule in Hagen, 2000 (cit. on p. 3).
- [Jür95] Manuela Jürgens. *LaTeX: Fortgeschrittene Anwendungen*. FernUniversität Gesamthochschule in Hagen, 1995 (cit. on p. 3).
- [KJ11] Markus Kohm and Jens-Uwe-Morawski. *KOMA-Script: Die Anleitung*. 2011 (cit. on p. 3).
- [Mie11a] André Miede. *A Classic Thesis Style: An Homage to The Elements of Typographic Style*. 2011 (cit. on p. 3).

Webpages

- [Fre10] Free Software Foundation, Inc. *GNU General Public License*. 2010. URL: http://www.gnu.org/licenses/gpl.html (visited on May 27, 2011) (cit. on p. 3).
- [Mie11b] André Miede. A Classic Thesis Style by André Miede. 2011. URL: http://www.miede.de/index.php?page=classicthesis (visited on May 27, 2011) (cit. on p. 3).

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Paderborn, October 4, 2015
Clemens Damke