MASTER THESIS INTELLIGENT SYSTEMS

A TRULY
MAGNIFICENT DEMO
OF THE LATEX SMART
THESIS TEMPLATE
WITH RESPECT TO
LONG TITLES AND
INCREDIBLY
FASCINATING
BLINDTEXT

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The secret of getting ahead is getting started.

— MARK TWAIN

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A MULTITUDE OF TESTS

Science is what we understand well enough to explain to a computer. Art is everything else we do.

— DONALD E. KNUTH

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.

SOME MATH 1.1

Here follows some tests for typesetting math. Note how we use the marginnote command to add some pretty notes which appear in the margin. This is quite nice, as it allows a more narrow width of the text body without the page looking too sparse¹. Here comes our first equation

This formula is also known as Pythagorean Theorem, albeit it is usually written with the variables a, b, and c.

$$z^2 = x^2 + y^2 (1.1)$$

$$z^{2} = x^{2} + y^{2}$$

$$z = \sqrt{x^{2} + y^{2}}.$$
(1.1)
(1.2)

¹ This is a footnote

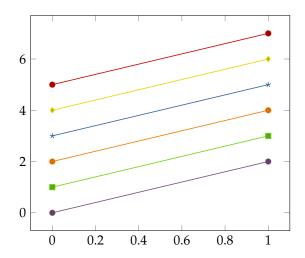


Figure 1.1: Just a fancy test for auto-coloring of graphs

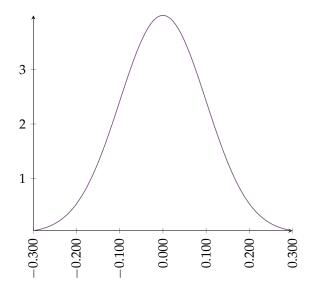


Figure 1.2: Gaussian distribution. This plot shows a guassian distribution with mean $\mu = 0$ and standard deviation $\sigma = 0.1$. As clearly visible, the value of the distribution never reaches zero.

Did you know? The discrete fourier transformation shown in equation 1.3 is the backbone of the modern information-society.

And here comes some more math, this time a discrete Fourier transformation (DFT) which is a little bit more sophisticated than the last example²:

$$f_m = \sum_{k=0}^{2n-1} x_k e^{-\frac{2\pi i}{2n}mk} \qquad m = 0, \dots, 2n-1.$$
 (1.3)

For words of science, see [Bot+10]. Unfortunately, that book has nothing about wolves.

1.2 EVEN MORE TESTS

Blood-red were his spurs i'
the golden noon; wine-red
was his velvet coat, when
they shot him down on
the highway, down like
a dog on the highway,
and he lay in his blood
on the highway, with the
bunch of lace at his throat.

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1.2.1 A test of three parts

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² More is always better!

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.

To test is to live. To believe is to die.

— ANONYMOUS HERETIC

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This is the second 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

```
1: init M \leftarrow 0 \in \mathcal{B}^{N \times r}
                                                                                          ▶ Result matrix
 2: for i \leftarrow 1 to N do
          for j \leftarrow r - r_1 + 1 to r do
 3:
 4:
               \ell \leftarrow \text{RandomSelect}(\{1, \dots, j-1\}) \triangleright \text{Uniformly select set entry}
               if M[i, \ell] = 1 then
 5:
                    M[i,j] \leftarrow 1
 6:
 7:
                    M[i,\ell] \leftarrow 1
 8:
 9:
               end if
          end for
10:
11: end for
```

Algorithm 2.1: Algorithm for the generation of a block M of N uncorrelated random vectors of length r, containing exactly r_1 ones.

Yes, this is just a test. If you read this, you are most likely doomed.

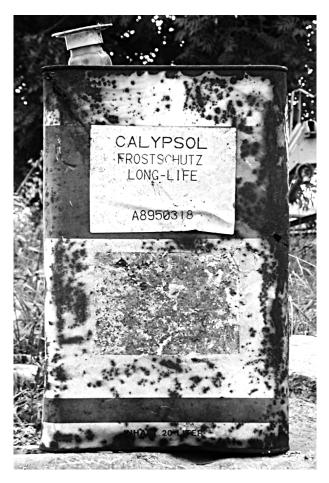


Figure 2.1: Truly a fine canister, comparable only to Mjölnir.

language. There is no need for special content, but the length of words should match the language.

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.

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

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This is the second paragraph. Hello, here is some text without a

ANOTHER TEST CHAPTER

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A picture says more than a thousand words (see 2.1).

2.1 THE THROAT OF THE WORLD

Margin notes help to add structure to long runs of text 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.

- First item in a list
 - First item in a list
 - Second item in a list
 - Third item in a list
 - Fourth item in a list
 - Fifth item in a list
- Second item in a list
- Third item in a list
- Fourth item in a list
- Fifth item in a list

2.2 THE SILENCE HAS BEEN BROKEN

Test test test

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.

2.3 DISCERNING THE TRANSMUNDANE

- 1. First item in a list
 - a) First item in a list
 - b) Second item in a list
 - c) Third item in a list
 - d) Fourth item in a list
 - e) Fifth item in a list
- 2. Second item in a list
- 3. Third item in a list
- 4. Fourth item in a list
- 5. Fifth item in a list

2.3 DISCERNING THE TRANSMUNDANE

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.

You can even add small formulas, like this one:

$$\sum_{i=1}^{n} i = n \cdot \frac{n+1}{2}$$

2.3.1 Composure, Speed, and Precision

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Or this one:

$$E = mc^2$$

GLOSSARY

 ${\bf Mj\"olnir}$ the hammer of Thor. 6

wolf an awesome animal and a subspecies of Canis lupus. 2

BIBLIOGRAPHY

[Bot+10] M. Botsch et al. *Polygon Mesh Processing*. Ak Peters Series. Taylor & Francis, 2010. ISBN: 9781568814261.