

A VERY COOL TOPIC

NAME OF THE STUDENT

Master Thesis

January 1, 1337

Secure Mobile Networking Lab Department of Computer Science Technische Universität Darmstadt



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Short summary of the contents in English...a great guide by Kent Beck how to write good abstracts can be found here:

https://plg.uwaterloo.ca/~migod/research/beck00PSLA.html

ZUSAMMENFASSUNG

Kurze Zusammenfassung des Inhaltes in deutscher Sprache...

ACKNOWLEDGMENTS

I would like to express my deepest gratitude to my parents and my family for supporting me in all the years of my studies and also while writing this thesis.

Special thanks for giving helpful advice while writing this thesis goes to Prof. Matthias Hollick and Adrian Loch.

Furthermore, I especially thank Sandrine Adélaïde and Adrian Loch for proofreading my thesis.

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SNR signal-to-noise ratio

INTRODUCTION

1

Start a chapter with text and not with a section header. Open the *classicthesis-config.tex* file to insert the title of your thesis, the names of your supervisors and the hand-in date of your thesis.

1.1 FIRST SECTION

After a section there should always be text before the next section. The first paragraph is always without indentation. Starting from the second paragraph, there is an indentation. Here is an equation without numbers for referencing:

$$\underbrace{\begin{pmatrix} \mathcal{B}_1 \\ \mathcal{B}_2 \\ \vdots \\ \mathcal{B}_R \end{pmatrix}}_{\mathcal{B}} = \underbrace{\begin{pmatrix} H_{1,1} & H_{1,2} & \dots & H_{1,T} \\ H_{2,1} & H_{2,2} & \dots & H_{2,T} \\ \vdots & \vdots & \ddots & \vdots \\ H_{R,1} & H_{R,2} & \dots & H_{R,T} \end{pmatrix}}_{\mathcal{H}_{A \to R}} \cdot \underbrace{\begin{pmatrix} \mathcal{A}_1 \\ \mathcal{A}_2 \\ \vdots \\ \mathcal{A}_T \end{pmatrix}}_{\mathcal{A}}$$

Here is an equation that you can reference:

$$\begin{pmatrix}
\mathcal{B}_{1} \\
\mathcal{B}_{2} \\
\vdots \\
\mathcal{B}_{R}
\end{pmatrix} = \begin{pmatrix}
H_{1,1} & H_{1,2} & \dots & H_{1,T} \\
H_{2,1} & H_{2,2} & \dots & H_{2,T} \\
\vdots & \vdots & \ddots & \vdots \\
H_{R,1} & H_{R,2} & \dots & H_{R,T}
\end{pmatrix} \cdot \begin{pmatrix}
\mathcal{A}_{1} \\
\mathcal{A}_{2} \\
\vdots \\
\mathcal{A}_{T}
\end{pmatrix}$$

$$\begin{pmatrix}
\mathcal{A}_{1} \\
\mathcal{A}_{2} \\
\vdots \\
\mathcal{A}_{T}
\end{pmatrix}$$

$$\begin{pmatrix}
\mathcal{A}_{1} \\
\mathcal{A}_{2} \\
\vdots \\
\mathcal{A}_{T}
\end{pmatrix}$$

1.1.1 Referencing

Take a look in the following list to reference sections, figures and equations:

- Section 1.1
- Figure 1
- Equation (1)

1.1.2 Acronyms

For acronyms you should use the *glossaries* package and put your acronyms in the *FrontBackmatter/acronyms.tex* file. The first acronym is always written in it's long form, the following occurrences are abbreviated: first occurrence signal-to-noise ratio (SNR), second occurrence SNR, plural SNRs.

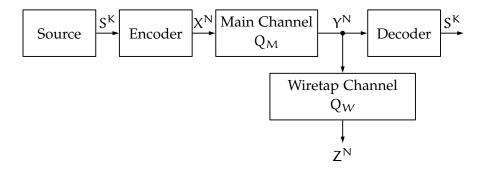


Figure 1: The wiretap channel (source: [1])

1.1.3 Examples on Figures

When using figures, use vector graphics whenever possible. In Figures 1 and 2 are some examples to generate vector graphics directly from LATEXcode. The second example is based on the <code>matlab2tikz</code> script for matlab. You find an example in the <code>gfx/matlab/create_example_graph.m</code> file. TikZ is used to generate the graphics. As it takes some time and memory to recompile a graphic, pdflatex caches generated figures when the --enable-write18 switch is set when calling pdflatex. Graphics are only recompiled when you uncomment the \tikzset{external/remake next} command. Figures should always appear after the first reference in the text or at the top of the same page as the reference, but never before the reference. Prefer placing figures on separate pages. Try to always have figures and text on each page. Or place enough figures to fill a page only with figures.

1.1.4 Examples on Tables

You can find an example table in Table 1 using the *tabular* environment. Note the use of horizontal lines from the *booktabs* package (\toprule, \midrule, and \bottomrule) and removed whitespace at both sides of the table (@{}) as proposed by Markus Püschel.¹

1.2 MARGIN NOTES

Especially in the standard SEEMOO template with wide margins, you are encouraged to insert text into the margins. If you decide to do so, plan to have at least one margin note per double page.

1.3 SOME EXAMPLE TEXT

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend

Here you can add text to the margin.

For example, to summarize the section next to it.

¹ https://www.inf.ethz.ch/personal/markusp/teaching/guides/guide-tables.pdf

| DISASTER | YEAR | COUNTRY | AREA (KM ²) |
|-------------------------|------|-------------|-------------------------|
| Nepal earthquake | 2015 | Nepal | 3610 |
| Cyclone Pam | 2015 | Vanuatu | 12 190 |
| Ludian earthquake | 2014 | China | 1 487 |
| Typhoon Haiyan | 2013 | Philippines | 71 503 |
| Christchurch earthquake | 2011 | New Zealand | 1 426 |
| East Africa drought | 2011 | East Africa | 2 346 466 |
| Tropical storm Washi | 2011 | Philippines | 104 530 |
| Tohoku earthquake | 2011 | Japan | 83 955 |
| Haiti earthquake | 2010 | Haiti | 27750 |
| Afghanistan blizzard | 2008 | Afghanistan | 652 864 |
| Sichuan earthquake | 2008 | China | 485 000 |
| Cyclone Nargis | 2008 | Myanmar | 676 578 |

Table 1: Large-scale natural disasters in the last ten years

consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Suspendisse vel felis. Ut lorem lorem, interdum eu, tincidunt sit amet, laoreet vitae, arcu. Aenean faucibus pede eu ante. Praesent enim elit, rutrum at, molestie non, nonummy vel, nisl. Ut lectus eros, malesuada sit amet, fermentum eu, sodales cursus, magna. Donec eu purus. Quisque vehicula, urna sed ultricies auctor, pede lorem egestas dui, et convallis elit erat sed nulla. Donec luctus. Curabitur et nunc. Aliquam dolor odio, commodo pretium, ultricies non, pharetra in, velit. Integer arcu est, nonummy in, fermentum faucibus, egestas vel, odio.

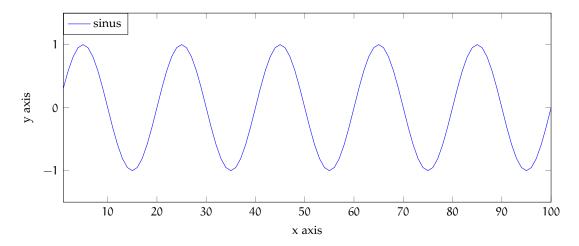


Figure 2: Caption of figure

Sed commodo posuere pede. Mauris ut est. Ut quis purus. Sed ac odio. Sed vehicula hendrerit sem. Duis non odio. Morbi ut dui. Sed accumsan risus eget odio. In hac habitasse platea dictumst. Pellentesque non elit. Fusce sed justo eu urna porta tincidunt. Mauris felis odio, sollicitudin sed, volutpat a, ornare ac, erat. Morbi quis dolor. Donec pellentesque, erat ac sagittis semper, nunc dui lobortis purus, quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis, fermentum vel, eleifend faucibus, vehicula eu, lacus.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Donec odio elit, dictum in, hendrerit sit amet, egestas sed, leo. Praesent feugiat sapien aliquet odio. Integer vitae justo. Aliquam vestibulum fringilla lorem. Sed neque lectus, consectetuer at, consectetuer sed, eleifend ac, lectus. Nulla facilisi. Pellentesque eget lectus. Proin eu metus. Sed porttitor. In hac habitasse platea dictumst. Suspendisse eu lectus. Ut mi mi, lacinia sit amet, placerat et, mollis vitae, dui. Sed ante tellus, tristique ut, iaculis eu, malesuada ac, dui. Mauris nibh leo, facilisis non, adipiscing quis, ultrices a, dui.

Morbi luctus, wisi viverra faucibus pretium, nibh est placerat odio, nec commodo wisi enim eget quam. Quisque libero justo, consectetuer a, feugiat vitae, porttitor eu, libero. Suspendisse sed mauris vitae elit sollicitudin malesuada. Maecenas ultricies eros sit amet ante. Ut venenatis velit. Maecenas sed mi eget dui varius euismod. Phasellus aliquet volutpat odio. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Pellentesque sit amet pede ac sem eleifend consectetuer. Nullam elementum, urna vel imperdiet sodales, elit ipsum pharetra ligula, ac pretium ante justo a nulla. Curabitur tristique arcu eu metus. Vestibulum lectus. Proin mauris. Proin eu nunc eu urna hendrerit faucibus. Aliquam auctor, pede consequat laoreet varius, eros tellus scelerisque quam, pellentesque hendrerit ipsum dolor sed augue. Nulla nec lacus.

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RELATED WORK

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DESIGN

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IMPLEMENTATION

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EVALUATION

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DISCUSSION

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CONCLUSIONS

Sed commodo posuere pede. Mauris ut est. Ut quis purus. Sed ac odio. Sed vehicula hendrerit sem. Duis non odio. Morbi ut dui. Sed accumsan risus eget odio. In hac habitasse platea dictumst. Pellentesque non elit. Fusce sed justo eu urna porta tincidunt. Mauris felis odio, sollicitudin sed, volutpat a, ornare ac, erat. Morbi quis dolor. Donec pellentesque, erat ac sagittis semper, nunc dui lobortis purus, quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis, fermentum vel, eleifend faucibus, vehicula eu, lacus.



SOME PROOF

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BIBLIOGRAPHY

[1] A. D. Wyner. "The Wire-tap Channel." In: *Bell Systems Technical Journal* 54.8 (1975), pp. 1355–1387.

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| | Name of the Student |