

# A Really Wonderful Computer Science Thesis

John Student

Bachelor's Thesis

2022

**Supervisors:** Prof. Dr. First Supervisor  
Prof. Dr. Second Supervisor  
Dr. Third Supervisor



# Abstract

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# Acknowledgement

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.



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# Chapter 1

## Introduction

This is an example file in which some basic macros are introduced, such as  $\mathbb{N}$ ,  $\mathbb{Z}$ ,  $\mathbb{Q}$ , or  $\mathbb{R}$  for sets of numbers; if we only refer to positive numbers, we write  $\mathbb{N}^+$ ,  $\mathbb{Z}^+$ ,  $\mathbb{Q}^+$ , or  $\mathbb{R}^+$  instead.  $\text{ALG}$  and  $\text{ALG}'$  denote some algorithms, i.e., finite descriptions of methods to solve given problems. With  $\text{cost}(\text{ALG})$  we mean the cost of  $\text{ALG}$ , and  $\text{gain}(\text{ALG}')$  is the gain of  $\text{ALG}'$ .  $\text{Pr}[X]$  is the probability of an event  $X$ , and  $\mathbb{E}[Y]$  is the expected value of a random variable  $Y$ . The big-Oh notation is, e.g., written as  $\mathcal{O}(n^2)$ ,  $\Omega(\log n)$ , and so on.

This document is divided into chapters and sections, only to demonstrate how to reference different parts of the document; their names have nothing to do with their content. The headlines were just chosen this way to propose a possible way of how to structure your thesis. [Chapter 2](#) contains some remarks about the bibliography; [Chapter 3](#) first and foremost includes [Sections 3.1](#) and [3.2](#). You can, however, skim through it to see some examples of theorems and definitions, e.g., [Definition 2.1](#) and [Theorem 3.1](#). As you can see, we use `\cref` instead of `\ref`. “This” is how to put quotation marks around something; ”these” look bad, "these" look even worse. To start a new paragraph, we add an empty line to the source code.

This would be what we want. In particular, we never use the double backslash in such a case.

Equations are typeset as

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

or

$$e^{i\pi} + 1 = 0 \tag{1.1}$$

if we want to refer to them, such as [\(1.1\)](#). For equivalences and implications, we use

$$A \implies B, \quad A \impliedby B, \quad \text{and} \quad A \iff B.$$

Note that there is a small space between the formulae and the full stop. This is to make sure that no one mixes up

$$\frac{1}{\text{ALG}'}$$

and

$$\frac{1}{\text{ALG}},$$

which could easily happen, right?

If we define a function, we write, e.g.,

$$f: \mathbb{N}^+ \rightarrow \mathbb{R}^+$$

instead of

$$f: \mathbb{N}^+ \rightarrow \mathbb{R}^+ ,$$

because the latter has a spacing that suggests division, such as  $a : b$ . To define the concrete function, we can write

$$f: x \mapsto 3x + 5 .$$

Note that we use  $\mapsto$  instead of  $\rightarrow$  in this case.

Expressions that have multiple lines are typeset as

$$\begin{aligned} 1 + 2 + \cdots + n &= \sum_{i=1}^n \\ &= \frac{n(n+1)}{2} \\ &= \frac{n^2 + n}{2} , \end{aligned}$$

and we note that there is no double backslash in the last line. If we want to refer to single lines, we do this by

$$\begin{aligned} \binom{n}{k} &= \frac{n!}{k! \cdot (n-k)!} \\ &= \frac{n!}{(n-n+k)! \cdot (n-k)!} \\ &= \frac{n!}{(n-(n-k))! \cdot (n-k)!} \\ &= \binom{n}{n-k} \end{aligned} \tag{1.2}$$

and refer to the third line by (1.2). Multiple equivalence operations are typeset as

$$\begin{aligned} &(\sin \alpha)^2 + (\cos \alpha)^2 = 1 \\ \iff &(\sin \alpha)^2 = 1 - (\cos \alpha)^2 \\ \iff &\sin \alpha = \pm \sqrt{1 - (\cos \alpha)^2} . \end{aligned}$$

We continue in the next chapter.

## Chapter 2

# Preliminaries

If we use a bibliography that exceeds a few items, we should use `bibtex` to manage them. In this example, we don't, because we only want to demonstrate a few points that are independent of the system used to manage the references. When citing something, we should avoid using the reference as a word, i.e., writing something like “see [3]” or “as shown in [1].” It is not an absolute faux pas to do so, but rather treat the brackets as what they are, and write “as shown by Turing [1].” If a paper is written by two authors, we write both their names; if there are more, we only mention the first one, e.g., Rivest et al. [2]. Note that we spelled out the given names of the authors listed in the bibliography. This is not the default setting, unfortunately; but I would like to encourage you to do so (if it is up to you).

There is a difference between a plain point and a full stop in that `TeX` puts more space behind the latter. If a point is not supposed to be full stop, we indicate this by an explicit inter-word space. We did so above behind the “et al.”

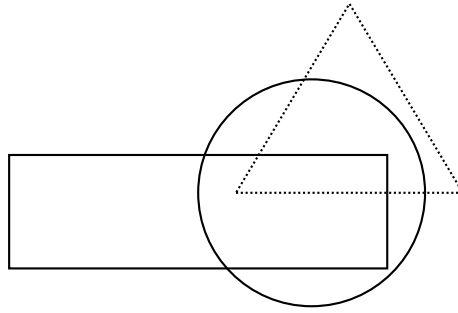
### 2.1 Some Definitions

We usually try to avoid having two headlines directly below of each other; there should be some text in between.

Definitions, theorems, lemmata etc. (again the explicit inter-word space) are typeset using the corresponding environments.

**Definition 2.1 (Algorithm).** *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.*

**Definition 2.2 (Greedy Algorithm).** *Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam*



**Figure 2.1.** Some geometric primitives.

*tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.*

Figures are put into the specific environments. There are multiple ways to draw pictures, but you should be careful to choose one that is able create vector graphics. We recommend `TikZ` as it nicely interacts with `LATEX`. An example is shown in [Figure 2.1](#). Note that the figure is displayed on the top of the page. This should not be changed, although it seems tempting to place figures where they are referenced. Furthermore, note that the label is placed below the caption. Tables should be treated similar; some more details are given in [Chapter 3](#).

## 2.2 Basic Observations

There is a special environment for case distinctions. This also allows you to define subcases, and can be used as follows.

*Case 1.* Nunc sed pede. Praesent vitae lectus. Praesent neque justo, vehicula eget, interdum id, facilisis et, nibh. Phasellus at purus et libero lacinia dictum. Fusce aliquet. Nulla eu ante placerat leo semper dictum. Mauris metus. Curabitur lobortis. Curabitur sollicitudin hendrerit nunc. Donec ultrices lacus id ipsum.

*Case 2.* Here, we distinguish two subcases.

*Case 2.1.* Pellentesque interdum sapien sed nulla. Proin tincidunt. Aliquam volutpat est vel massa. Sed dolor lacus, imperdiet non, ornare non, commodo eu, neque. Integer pretium semper justo. Proin risus. Nullam id quam. Nam neque. Duis vitae wisi ullamcorper diam congue ultricies. Quisque ligula. Mauris vehicula.

*Case 2.2.* Nam quis enim. Quisque ornare dui a tortor. Fusce consequat lacus pellentesque metus. Duis euismod. Duis non quam. Maecenas vitae dolor in ipsum auctor vehicula. Vivamus nec nibh eget wisi varius pulvinar. Cras a lacus. Etiam et massa. Donec in nisl sit amet dui imperdiet vestibulum. Duis porttitor nibh id eros.

*Case 3.* Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy

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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 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.



# Chapter 3

## Results

Again, no two headlines are placed directly below of each other; it is recommended to use this space to give a small high-level summary of what is covered in the following sections.

### 3.1 Upper Bounds

In what follows, you see how to typeset a theorem and its proof. Note that the qed-symbol is placed at the end automatically.

**Theorem 3.1.** *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 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.*

*Proof.* Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

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.

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, consectetur at, consectetur 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.  $\square$

## 3.2 Lower Bounds

Here, we have a lemma and a corollary instead of a theorem. Since the corollary has no proof, the qed-symbol is manually placed at its end.

**Theorem 3.2.** *Etiam euismod. Fusce facilisis lacinia dui. Suspendisse potenti. In mi erat, cursus id, nonummy sed, ullamcorper eget, sapien. Praesent pretium, magna in eleifend egestas, pede pede pretium lorem, quis consectetur tortor sapien facilisis magna. Mauris quis magna varius nulla scelerisque imperdiet. Aliquam non quam. Aliquam porttitor quam a lacus. Praesent vel arcu ut tortor cursus volutpat. In vitae pede quis diam bibendum placerat. Fusce elementum convallis neque. Sed dolor orci, scelerisque ac, dapibus nec, ultricies ut, mi. Duis nec dui quis leo sagittis commodo.*

*Proof.* Aliquam lectus. Vivamus leo. Quisque ornare tellus ullamcorper nulla. Mauris porttitor pharetra tortor. Sed fringilla justo sed mauris. Mauris tellus. Sed non leo. Nullam elementum, magna in cursus sodales, augue est scelerisque sapien, venenatis congue nulla arcu et pede. Ut suscipit enim vel sapien. Donec congue. Maecenas urna mi, suscipit in, placerat ut, vestibulum ut, massa. Fusce ultrices nulla et nisl.

Etiam ac leo a risus tristique nonummy. Donec dignissim tincidunt nulla. Vestibulum rhoncus molestie odio. Sed lobortis, justo et pretium lobortis, mauris turpis condimentum augue, nec ultricies nibh arcu pretium enim. Nunc purus neque, placerat id, imperdiet sed, pellentesque nec, nisl. Vestibulum imperdiet neque non sem accumsan laoreet. In hac habitasse platea dictumst. Etiam condimentum facilisis libero. Suspendisse in elit quis nisl aliquam dapibus. Pellentesque auctor sapien. Sed



**Table 3.1.** Different functions

$n$	10	100	200	1 000
$\log_{10} n$	1	2	$\approx 2.30$	3
$3n$	30	300	600	3 000
$n^2$	100	10 000	40 000	100 000
$n^3 + n/2$	1 005	1 000 050	8 000 100	100 000 500

egestas sapien nec lectus. Pellentesque vel dui vel neque bibendum viverra. Aliquam porttitor nisl nec pede. Proin mattis libero vel turpis. Donec rutrum mauris et libero. Proin euismod porta felis. Nam lobortis, metus quis elementum commodo, nunc lectus elementum mauris, eget vulputate ligula tellus eu neque. Vivamus eu dolor.  $\square$

**Corollary 3.1.** *Nulla in ipsum. Praesent eros nulla, congue vitae, euismod ut, commodo a, wisi. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Aenean nonummy magna non leo. Sed felis erat, ullamcorper in, dictum non, ultricies ut, lectus. Proin vel arcu a odio lobortis euismod. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Proin ut est. Aliquam odio. Pellentesque massa turpis, cursus eu, euismod nec, tempor congue, nulla. Duis viverra gravida mauris. Cras tincidunt. Curabitur eros ligula, varius ut, pulvinar in, cursus faucibus, augue.*  $\square$

### 3.3 Further Considerations

As mentioned in [Section 2.1](#), tables are also always at the top of a page. An example is shown in [Table 3.1](#). In contrast to figures, the captions of tables are displayed above the tables and not below. Again, the label is placed below the caption. Tables never use vertical lines, but only horizontal ones.

Note that we inserted small spaces behind blocks of three consecutive digits, e.g., we wrote 10 000 instead of 10000, to make them easier to parse.



## Chapter 4

# Conclusion

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

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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 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.

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

# Bibliography

- [1] Stephen A. Cook. The complexity of theorem-proving procedures. In *Proceedings of the 3rd Annual ACM Symposium on Theory of Computing (STOC 1971)*, pages 151–158. Association for Computing Machinery, 1971.
- [2] Ronald L. Rivest, Adi Shamir, and Leonard M. Adleman. A method for obtaining digital signatures and public-key cryptosystems. *Communications of the ACM* 21(2):120–126, 1978.
- [3] Alan M. Turing. On computable numbers, with an application to the Entscheidungsproblem. In *Proceedings of the London Mathematical Society*, 42(2):230–265, 1936.



# Eigenständigkeitserklärung

Ich bestätige, die vorliegende Arbeit selbständig und in eigenen Worten verfasst zu haben. Davon ausgeschlossen sind sprachliche und inhaltliche Korrekturvorschläge durch die Betreuer und die Betreuerinnen der Arbeit.

**Titel der Arbeit:** A Really Wonderful Computer Science Thesis

**Verfasst von:** John Student

Ich bestätige mit meiner Unterschrift

- Ich habe keine im Merkblatt “[Zitier-Knigge](#)” beschriebene Form des Plagiats begangen.
- Ich habe alle Methoden, Daten und Arbeitsabläufe wahrheitsgetreu dokumentiert.
- Ich habe keine Daten manipuliert.
- Ich habe alle Personen erwähnt, welche die Arbeit wesentlich unterstützt haben.

Ich nehme zur Kenntnis, dass die Arbeit mit elektronischen Hilfsmitteln auf Plagiate überprüft werden kann.

Zürich, 8. September 2022

