

UNIVERZA NA PRIMORSKEM
FAKULTETA ZA MATEMATIKO, NARAVOSLOVJE IN
INFORMACIJSKE TEHNOLOGIJE

Master's thesis
(Magistrsko delo)

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(Naslov magistrskega dela v slovenskem jeziku)

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Izvleček predstavlja kratek, a jedrnat prikaz vsebine naloge. V največ 250 besedah nakažemo problem, metode, rezultate, ključne ugotovitve in njihov pomen.

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Izvleček predstavlja kratek, a jedrnat prikaz vsebine naloge. V največ 250 besedah nakažemo problem, metode, rezultate, ključne ugotovitve in njihov pomen.

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List of Abbreviations

i.e. that is

e.g. for example

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1 INTRODUCTION

In this sections one describes the problem, discussed in the masters thesis. One presents the main ideas and introduces the necessary definitions. One can also summarise all the mathematical background and concepts that will be used later on and cite the literature necessary and relevant to the discussed concepts. However, the literature can be cited later on as well.

Example of a citation:

Matrix bandwidth minimisation can help with with matrix storage and computation e.g. in Gauss elimination. We refer the reader to [3, 7, 21].

2 CHAPTER

Lorem ipsum dolor sit amet,...

2.1 SECTION

Lorem ipsum dolor sit amet,...

2.1.1 Subsection

Lorem ipsum dolor sit amet,...

2.1.1.1 Subsubsection

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Definition 2.1. Let $M \in \mathbb{Z}^{d \times n}$ and let $M_d \subseteq M$, where $\det(M_d) \neq 0$. We define the n -th box spline over the matrix M recursively as

$$B_M(\mathbf{x}) := \int_0^1 B_{M_n \setminus \mathbf{v}_n}(\mathbf{x} - t \cdot \mathbf{v}_n) dt$$

and

$$B_{M_d}(\mathbf{x}) := \begin{cases} \frac{1}{|\det M_d|}, & \mathbf{x} \in M_d[0, 1) \\ 0, & \text{sicer} \end{cases}.$$

Lemma 2.2. *Lemma is a statement of a lesser importance than theorem, but often necessary in order to proof the main theorem. Lema je pomožna trditev, ki služi za dokaz glavnega izreka.*

Proof. Here the author writes Lemma's proof. Proof should be as short as possible, but never the less understandable to every student. Pay attention to the logical structure of the proof. Every step should be argued. $\square$

Theorem 2.3. *Theorem is the most important statement in a section. There should be as few theorems as possible. Other statements should be formed as Lemmas or Corollaries.*

Proof. Proof of the Theorem to be written here. $\square$

Consequence 2.4. *Consequence is a conclusion, that follows immediately from the main proof. It only needs a short proof (few lines should suffice). If the Consequence can not be proven in few lines, it is no longer a consequence and should be formed as a lemma or a corollary.*

Example 2.5. Example highlights the main theorem or a lemma. It could also serve as a counterexample if we let out some hypothesis.

This is how one adds a figure:

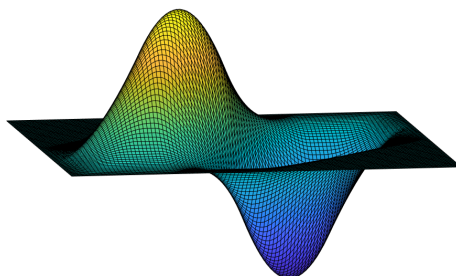


Figure 1: Gradient of a bivariate quartic box spline.

This is how one adds a table.

Table 1: PLOGBAND Algorithm

PLOGBAND Algorithm:

Inputs: A graph $G = G(V, E)$ with n vertices and m edges,
 $L \in \mathbb{N}$.

1. For $1 \leq j \leq L$, let p_j be numbers distributed approximately uniform (geometrical) between $1 - 1/\log \log n$ in $1/\log n$ i.e. all the ratios p_j/p_{j+1} are approximately equal. (Precise formulas are described in section 2.1).
2. Sort the vertices in ascending order with respect to the $h(v)$ value. Order the vertices with the same h value arbitrarily.
3. Return the ordered list of vertices as linear ordering.

This is how a figure or a table is referenced.

All we need to finish the proof is summarised in Table 1.

For an example, we refer the reader to Figure 1.

In the same manner, we can also reference sections, chapters, theorems, etc.

Example of an algorithm's pseudocode:

Algorithm 1: Matrix multiplication

Input: Real matrices A and B size $n \times n$.

Output: Matrix $C = A \cdot B$.

```
1 for  $i = 1, \dots, n$ 
2   for  $j = 1, \dots, n$ 
3      $C[i, j] := A[i, 1] \cdot B[1, j];$ 
4     for  $k = 2, \dots, n$ 
5        $C[i, j] := C[i, j] + A[i, k] \cdot B[k, j];$ 
6 if  $n = 2$  then
7   do nothing
8 return  $C;$ 
```

3 CHAPTERS TITLE

This is how we cite web sources: [23–25].

This is how we cite articles that are accepted or in print: [13–16].

This is how we cite submitted articles: [17, 18].

4 CONCLUSION

In a few sentences author concludes, what was discussed in the master's thesis. If desired author can cite some additional references for a reader interested in further studies, etc.

5 DALJŠI POVZETEK V SLOVENSKEM JEZIKU

V kolikor je študentu v skladu s pravili fakultete odobrena priprava magistrskega dela v angleškem jeziku, mora študent pripraviti povzetek dela v obsegu od 4.000 do 10.000 znakov (s presledki) v slovenskem jeziku. Povzetek v slovenskem jeziku je zadnje poglavje magistrskega dela ter je ustrezno oštevilčeno (pred poglavjem Literatura in viri).

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Appendices

APPENDIX A Tittle of the first appendix

First appendix to be added here.

APPENDIX B Tittle of the second appendix

Second appendix to be added here.