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Dissertation submitted to the Pontifical Catholic University of Rio Grande do Sul in partial fulfillment of the requirements for the degree of Ph. D. in Computer Science.

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Co-Advisor: Prof. Ciclano de Farias

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Dedico este trabalho a meus pais.

“The art of simplicity is a puzzle of complexity.”
(Douglas Horton)

ACKNOWLEDGMENTS

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RESUMO

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Palavras-Chave: lorem, ipsum, dolor, sit, amet.

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ABSTRACT

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Keywords: lorem, ipsum, dolor, sit, amet.

LIST OF FIGURES

Figure 1.1 – This is a figure with a very long caption which looks ugly in the corresponding list of figures. Fortunately, there is an optional parameter for a shorter replacement of this monstrosity	31
Figure 2.1 – This is another figure	36

LIST OF TABLES

Table 2.1 – This is a table	35
Table 2.2 – Note que a legenda da tabela fica na parte de cima	37

LIST OF ALGORITHMS

1	An algorithm with an optional, shorter caption	32
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LIST OF ACRONYMS

ABC – Associação Brasileira de Computadores

IJK – lorem ipsum dolor sit

XYZ – lorem ipsum dolor sit

LIST OF ABBREVIATIONS

Abrev. – Abreviatura

Inform. – Informática

LIST OF SYMBOLS

Hz – Hertz	31
π – Constante com valor aproximado de 3.1415926	31

CONTENTS

1	INTRODUÇÃO	31
1.1	PRIMEIRA SEÇÃO	32
1.1.1	SUBSEÇÃO	33
2	ANOTHER CHAPTER	35
2.1	ANOTHER SECTION	35
2.1.1	ANOTHER SUBSECTION	37
	REFERENCES	39
	APPENDIX A – Meu primeiro apêndice	41
	APPENDIX B – My second appendix	43
	ATTACHMENT A – Meu primeiro anexo	45
	ATTACHMENT B – My second attachment	47

1. INTRODUÇÃO

lorem ipsum dolor sit amet Capítulo 1 consetetur sadipscing elitr sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat sed diam voluptua at vero eos et accusam et justo duo dolores et ea rebum stet clita kasd gubergren no sea takimata sanctus est lorem ipsum dolor sit amet lorem ipsum dolor sit amet consetetur sadipscing elitr sed diam nonumy eirmod. Ver Figura 1.1.

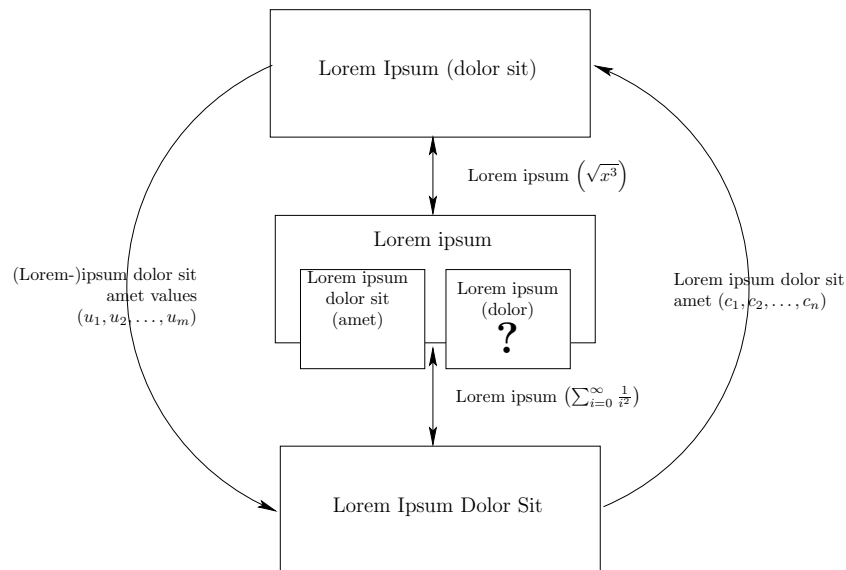


Figure 1.1 – This is a figure with a very long caption which looks ugly in the corresponding list of figures. Fortunately, there is an optional parameter for a shorter replacement of this monstrosity

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tempor invidunt ut labore et dolore magna aliquyam erat sed diam voluptua at vero eos et accusam et justo duo dolores et ea rebum [CLRS01].

dolor sit [Ben07] amet consetetur sadipscing elitr sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat sed diam voluptua at vero [Atk04].

1. lorem
2. ipsum
3. dolor
4. sit

Algorithm 1 This is an algorithm with a very long caption. However, we replaced it with a shorter version in the Outline for legibility reasons

```

1: function  $\sigma(i, j)$ 
2: {table lorem ipsum dolor consetetur sadipscing elitr sed  $(i, j)$ }
3: if table  $[i, j]$ .memoized then
4:   return table  $[i, j]$ .error
5: end if
6: minerror  $\leftarrow \infty$ 
7: bestt  $\leftarrow \text{nil}$ 
8: for each template  $t$  in  $T$  do
9:   error  $\leftarrow \text{allocate}(t, i, j)$ 
10:  if error < minerror then
11:    minerror  $\leftarrow$  error
12:    bestt  $\leftarrow t$ 
13:  end if
14: end for
15: table  $[i, j]$ .memoized  $\leftarrow$  true
16: table  $[i, j]$ .template  $\leftarrow$  bestt
17: table  $[i, j]$ .error  $\leftarrow$  minerror
18: return minerror

```

5. amet

6. consetetur

1.1 Primeira seção

lorem ipsum dolor sit $x \leq 2$ amet consetetur sadipscing elitr sed diam nonumy eirmod Seção 1.1 tempor invidunt ut labore et dolore magna aliquyam erat sed diam voluptua at vero eos et accusam et justo duo dolores et ea rebum stet clita. [Oli08]

$$\int_0^{\infty} x^2 + \frac{\pi}{\sum_{i=0}^n \frac{1}{i^2}} \quad (1.1)$$

kasd gubergren no sea Equação (1.1) takimata sanctus est lorem ipsum dolor sit amet lorem ipsum dolor sit amet consetetur sadipscing elitr sed diam nonumy eirmod. [PCC⁺11]

amet lorem ipsum dolor sit amet consetetur sadipscing elitr sed diam nonumy eirmod. [Pic08]

1.1.1 Subseção

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Subsubsub

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$$L(i, j, w, h) = \begin{cases} E(i, w, h) & i = j \\ \min \left(\min_{k=i}^{j-1} \{\heartsuit(i, k, j, w, h)\}, \min_{k=i}^{j-1} \{\spadesuit(i, k, j, w, h)\} \right) & i < j. \end{cases} \quad (1.2)$$

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De acordo com Esquedo (2011, p. 19):

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2. ANOTHER CHAPTER

lorem ipsum dolor sit amet consetetur sadipscing elitr sed diam nonumy eirmod tempor invidunt [Pla81] ut labore et dolore magna aliquyam erat sed diam voluptua at vero eos et accusam et justo duo dolores et ea rebum stet clita kasd gubergren no sea takimata sanctus est lorem ipsum dolor sit amet lorem ipsum dolor sit amet consetetur sadipscing elitr sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat sed diam voluptua at vero eos et accusam et justo duo dolores et ea rebum stet clita kasd gubergren no sea takimata sanctus est lorem ipsum dolor sit amet lorem ipsum. A Tabela 2.1 mostra o cronograma. [Wik09]

Atividade	Table 2.1 – This is a table			
	Ano/Semestre			
	2011/II	2012/I	2012/II	2013/I
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3	✓	✓	✓	
4	✓	✓	✓	×
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7	×			
8		×		
9		×	×	
10	×	×	×	
11	×	×	×	×

2.1 Another section

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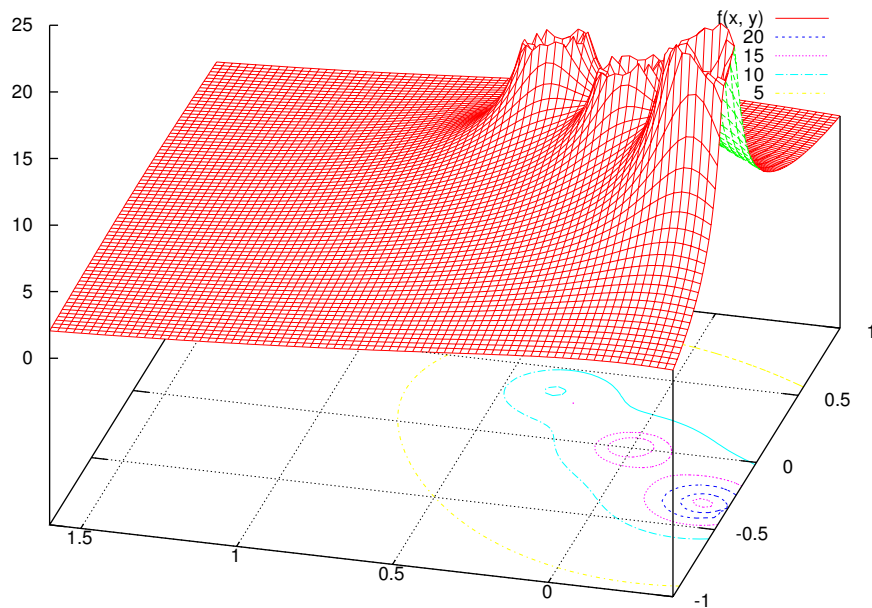


Figure 2.1 – This is another figure

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2.1.1 Another subsection

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Another subsubsection

lorem ipsum dolor sit amet consetetur sadipscing elitr sed diam nonumy. A seguir, a Tabela 2.2 mostra algo mais simples.

Table 2.2 – Note que a legenda da tabela fica na parte de cima

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diam	nonumy	eirmod
tempor	invidunt	ut
labore	et	dolore
magna	aliquyam	erat
sed	diam	voluptua
at	vero	eos

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APPENDIX A – MEU PRIMEIRO APÊNDICE

APPENDIX B – MY SECOND APPENDIX

ATTACHMENT A – Meu primeiro anexo

ATTACHMENT B – My second attachment