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University of City, Country

Title First Name LAST NAME

Co-Supervisor

University of City, Country

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University of City, Country

A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in the subject of Computer Science

Month Year

University of Namur PReCISE Research Center UNIVERSITE DE NAMUE

FACULTÉ D'INFORMATIQUE







"output" — 2024/2/21 — 14:53 — page 2 — #2













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"output" — 2024/2/21 — 14:53 — page iii — #5



""Citation""

—Author







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ABSTRACT

This is an abstract.







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RÉSUMÉ

Ceci est un résumé.







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ACKNOWLEDGEMENTS

Thanks.







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Part I

Preface





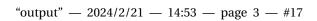


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CHAPTER

Introduction

Ceci est une introduction.

To do: Write







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CHAPTER

BACKGROUND







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CHAPTER

STATE OF THE ART







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Part II

Contributions





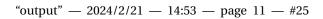


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CHAPTER

CHAPTER

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CHAPTER 4. CHAPTER

4.1 Sections

4.1.1 Subsection

Subsubsection

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer 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.

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

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.

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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







"output" — 2024/2/21 — 14:53 — page 13 — #27



4.1.1. Subsection

nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetuer.

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.







"output" — 2024/2/21 — 14:53 — page 14 — #28



CHAPTER 4. CHAPTER

4.2 Text

This is a paragraph. This is another paragraph.

This is a bold paragraph.

This is an italic paragraph.

THIS IS A PARAGRAPH WITH CAPITAL LETTERS.







"output" — 2024/2/21 — 14:53 — page 15 — #29



4.2. Text

This is the first paragraph.

This is a paragraph with a vertical space of 1.5cm around.

This is a paragraph with a small vertical space after.

This is a paragraph with medium vertical space after.

This is a paragraph with large vertical space after.

This is the last paragraph.







"output" — 2024/2/21 — 14:53 — page 16 — #30



Chapter 4. Chapter

This is a paragraph with a small vertical space after.

This is a paragraph with medium vertical space after.

This is a paragraph with large vertical space after.

This is the last paragraph.







"output" — 2024/2/21 — 14:53 — page 17 — #31



4.2. Text

Automatic hyphenation

Maison voiture lit table chaise chien chat fleur journal tasse bic punaise anticonstitutionnellement.

Custom hyphenation in text

Maison voiture lit table chaise chien chat fleur journal tasse bic punaise anticonstitutionnellement.

Custom hyphenation configured in style

Incesable space (without)

Anticonstitution nellement interd'e partementalisation dichlorodiph'enyl trichloro'ethane 'et'e.

Incesable space (with)

Anticonstitutionnellement interdépartementalisation dichlorodiphényltrichloroéthane été.







"output" — 2024/2/21 — 14:53 — page 18 — #32



CHAPTER 4. CHAPTER

"This is a citation".







"output" — 2024/2/21 — 14:53 — page 19 — #33



4.3. Characters

4.3 Characters

Short dash : -Middle dash : -Long dash : —







"output" — 2024/2/21 — 14:53 — page 20 — #34



CHAPTER 4. CHAPTER

4.4 Hyperlinks

https://fr.wikipedia.org/ This is a clickable link towards Wikipedia









4.5. Enumerations

4.5 Enumerations

- A. Item
- B. Item
- C. Item
- A) Item
- B) Item
- C) Item
- (i) Item
- (ii) Item
- (iii) Item
 - Item
- Item
- Item
- ☐ Item
- Item
- Item
- Item
- (i) Item with content

Content.

(ii) Item with content

Content.

(iii) Item with content

Content.

- (i) Item
- (ii) Item
- (iii) Item

The following enumeration resumes the previous one:

- (iv) Item
- (v) Item
- (vi) Item
 - Item 1
 - Item 2
 - Sub-item 1.1
 - Sub-item 1.2
 - Sub-item 1.3
 - Item 3







"output" — 2024/2/21 — 14:53 — page 22 — #36



CHAPTER 4. CHAPTER

This is an item

Vivamus eu tellus sed tellus consequat suscipit. Nam orci orci, malesuada id, gravida nec, ultricies vitae, erat. Donec risus turpis, luctus sit amet, interdum quis, porta sed, ipsum. Suspendisse condimentum, tortor at egestas posuere, neque metus tempor orci, et tincidunt urna nunc a purus. Sed facilisis blandit tellus. Nunc risus sem, suscipit nec, eleifend quis, cursus quis, libero. Curabitur et dolor. Sed vitae sem. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Maecenas ante. Duis ullamcorper enim. Donec tristique enim eu leo. Nullam molestie elit eu dolor. Nullam bibendum, turpis vitae tristique gravida, quam sapien tempor lectus, quis pretium tellus purus ac quam. Nulla facilisi.









4.6. Tables

4.6 Tables

Long table possibly on multiple pages:

Table 4.1: A long table

Title										
Subtitle										
Cell	Cell	Cell	Cell							
Cell	Cell	Cell	Cell							
Cell	Cell	Cell	Cell							
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Chapter 4. Chapter

Cell	Cell	Cell	Cell
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Cell	Cell	Cell	Cell
Cell	Cell	Cell	Cell
Cell	Cell	Cell	Cell
Cell	Cell	Cell	Cell
Cell	Cell	Cell	Cell
Cell	Cell	Cell	Cell







"output" — 2024/2/21 — 14:53 — page 25 — #39



4.6. Tables

Table with enumerations :

Table 4.2: A table with enumerations

	Title
Subti	tle
Cell	List item 1List item 2
Cell	List item 1List item 2
Cell	List item 1List item 2







"output" — 2024/2/21 — 14:53 — page 26 — #40



CHAPTER 4. CHAPTER

Stylished table:

Table 4.3: A stylished table

		A multi	column	
	A	В	C	D
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5









4.7. Graphics

4.7 Graphics



Figure 4.1: Figure SVG

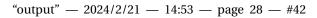




Figure 4.2: Figure PNG











Chapter 4. Chapter

4.8 Algorithms

Algorithm 1 An algorithm for computing

```
1: procedure COMPUTE(x, y, z \leftarrow 0)
Require: Input data
Ensure: Output result
 2:
         a \leftarrow x
         b \leftarrow y
 3:
 4:
         c \leftarrow \emptyset
         for all item_a \in a do
 5:
             d \leftarrow 0
 6:
             for all item_b \in b do
 7:
 8:
                 if item_a = item_b then
                     d \leftarrow d + 1
 9:
                     c \leftarrow c \cup \{item_a\}
10:
                 else
11:
                     d \leftarrow d + 0
12:
                 end if
13:
             end for
14:
15:
         end for
16:
         return c, d
17: end procedure
```







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4.9. Listings

4.9 Listings

Listing 4.1: This is a java code

```
public class Java {
   public static void main(String[] args) {
       System.out.println("Hello World");
4   }
5 }
```







"output" — 2024/2/21 — 14:53 — page 30 — #44



CHAPTER 4. CHAPTER

4.10 References

Section: 4.1 Graphics: 4.1 Item: A.

Bibliography reference : Lamport [1991]

Bibliography full entry: Lamport, L. (1991). LaTeX. ŚCompany Cyfronet







"output" — 2024/2/21 — 14:53 — page 31 — #45



4.11. Footnote

4.11 Footnote

This is a sentence containing a footnote 1 .





 $^{^{1}\}mathrm{This}$ is the footnote



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Chapter 4. Chapter

4.12 Glossary and acronyms

The term "Latex" or "latex" is defined in the glossary.

The term "language" (in plural "languages") is defined in the glossary.

The acronym "GCD" is in short form.

The acronym "Greatest Common Divisor" is in long form.

The acronym "Greatest Common Divisor (GCD)" is in full form.

The acronym "Greatest Common Divisor (GCD)" is used for the first time in the text under the full form and than reused here "GCD" in the short form.







"output" — 2024/2/21 — 14:53 — page 33 — #47



NEW CHAPTER

The full form of the acronym "Greatest Common Divisor (GCD)" is reset in a new chapter and continues his short form after.









CHAPTER 4. CHAPTER

The term Apple is in the index. The term Banana is in the index. The term Chocolate is in the index. The term Dolphin is in the index. The term Elephant is in the index. The term Forest is in the index. The term Galaxy is in the index. The term Harmony is in the index. The term Iceberg is in the index. The term Jellyfish is in the index. The term Kangaroo is in the index. The term Lemon is in the index. The term Mountain is in the index. The term Notebook is in the index. The term Ocean is in the index. The term Penguin is in the index. The term Quasar is in the index. The term Raindrop is in the index. The term Sunshine is in the index. The term Telescope is in the index. The term Umbrella is in the index. The term Vanilla is in the index. The term Waterfall is in the index. The term Xenon is in the index. The term Yoga is in the index. The term Zephyr is in the index. The term LaTeX is in the index. The term Avocado is in the index. The term Blossom is in the index. The term Carousel is in the index. The term Dandelion is in the index. The term Enigma is in the index. The term Flamingo is in the index. The term Gargoyle is in the index. The term Halcyon is in the index. The term Iridescent is in the index. The term Jacaranda is in the index. The term Kaleidoscope is in the index. The term Labyrinth is in the index. The term Magnolia is in the index. The term Nebula is in the index. The term Opulent is in the index. The term Pinnacle is in the index. The term Quasar is in the index. The term Radiant is in the index. The term Serendipity is in the index. The term Tranquil is in the index.







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4.12. Glossary and acronyms

The term Utopia is in the index. The term Velvet is in the index. The term Whimsical is in the index. The term Xanadu is in the index. The term Yonder is in the index. The term Zenith is in the index. The term Eclipse is in the index. The term Firefly is in the index. The term Glisten is in the index. The term Halcyon is in the index. The term Illusion is in the index. The term Jamboree is in the index. The term Kismet is in the index. The term Luminous is in the index. The term Melody is in the index. The term Nimbus is in the index. The term Odyssey is in the index. The term Plenitude is in the index. The term Quixotic is in the index.





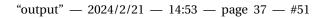


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CHAPTER

CHAPTER ON SAME PAGE (1)



CHAPTER ON SAME PAGE (2)





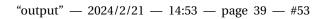


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Part III

Postface





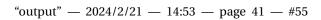


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C H A P T E R

CHAPTER





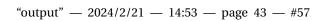


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CONCLUSION

This is a conclusion.





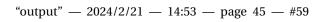


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Part IV

Appendices







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APPENDIX 1







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LIST OF ALGORITHMS

1	An algorithm for computing											20
1	An algorithm for computing	 	 •	 	•	 •		•	•			20





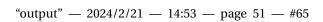


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LIST OF LISTINGS





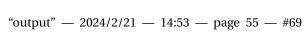


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GLOSSARY

language Way of communication. 32

 $\prescript{\mathbb{E}}\prescript{Xis}$ a markup language specially suited for scientific documents. 32latex







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ACRONYMS

GCD Greatest Common Divisor. 32, 33





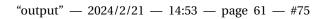


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_				
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Apple Avocado		34 34	Galaxy Gargoyle Glisten		34 34 35
	В			Н	
Banana Blossom		34 34	Halcyon Harmony		34, 35 34
	С			1	
Carousel Chocolate		34 34	Iceberg Illusion Iridescent		34 35 34
	D			J	
Dandelion Dolphin		34 34	Jacaranda Jamboree Jellyfish		34 35 34
	E			K	
Eclipse Elephant Enigma		35 34 34	Kaleidoscope Kangaroo Kismet		34 34 35
	F			L	
Firefly Flamingo Forest		35 34 34	Labyrinth Latex Lemon Luminous		34 34 34 35
					61





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Magnolia Melody Mountain		34 35 34		Т	
	N		Telescope Tranquil		34 34
Nebula Nimbus Notebook		34 35 34	Umbrella	U	34
INOTEDOOK	0	34	Utopia	\ /	35
0		24		V	
Ocean Odyssey Opulent		34 35 34	Vanilla Velvet		34 35
	Р			W	
Penguin Pinnacle Plenitude		34 34 35	Waterfall Whimsical		34 35
	Q			X	
Quasar Quixotic		34 35	Xanadu Xenon		35 34
	R			Υ	
Radiant Raindrop		34 34	Yoga Yonder		34 35
	S			Z	
Serendipity		34	Zenith Zephyr		35 34







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