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BY

AUTHOR'S NAME
Author's degree, year

THESIS

Submitted as partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Electrical and Computer Engineering
in the Graduate College of the
University of Illinois at Chicago, 2021

Chicago, Illinois

Defense Committee:

Member 1, Chair and Advisor
Member 2
Member 3
Member 4
Member 5, Affiliation

To myself,

the only person worthy of my company

ACKNOWLEDGMENTS

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AN

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March 17, 2021

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LIST OF TABLES

LIST OF FIGURES

FIGURE		PAGE

LIST OF ALGORITHMS

LIST OF ABBREVIATIONS

LOL   Laugh Out Loud

LMAO   Laughing My Ass Off

UIC   University of Illinois at Chicago

NOTATIONS

Bold lowercase letters are used to denote the vectors and bold uppercase letters for matrices.

The following mathematical notations are used throughout this thesis:

$|x|$ the absolute value of a scalar x

$\boldsymbol{x}_m(k)$ the kth element of vector $\boldsymbol{x}_m$

$[\boldsymbol{X}]_{i,j}$ the $(i,j)^{\text{th}}$ element of matrix $\boldsymbol{X}$

$\|\boldsymbol{x}\|_p$ the l_p-norm of $\boldsymbol{x}$, defined as $\left(\sum_k |\boldsymbol{x}(k)|^p\right)^{\frac{1}{p}}$

j the imaginary unit *i.e.*, $j = \sqrt{-1}$

SUMMARY

Briefly describe your project and your contribution here.

CHAPTER 1

INTRODUCTION

This template was created mainly to keep things organized. In terms of design rules, it closely follows the UIC ECE thesis template. Although it was created in 2019, design rules may change in the future. So you might need to update the contents in the 'bin' folder and modify some lines in the code. However, otherwise you don't need to touch the 'bin' folder. Some important things to keep in mind,

1. use '\CHID_' to label everything, so that you can refer anything from anywhere without worrying about duplicate labels. Follow the examples in the below.

2. Every paper in the 'papers' folders has a 'figures' folder inside it. Put figures in the corresponding 'figures' folder.

3. Put appendices in appendices.tex with appropriate CHID.

4. Good luck!

1.1 Use of CHID

Notice how the content is being referred outside the its own chapter.

- Figure 1 is in the Chapter 1.

- Figure 2 is in the Chapter 2.

- Figure 3 is in the Chapter 3.

- Figure 4 is in the Chapter 4.

- Figure 5 is in the Chapter 5.

- Figure 6 is in the Chapter 6.

You can use CHID when referring to the content inside its own chapter, but you need to use the code if you want to use it outside. The benefit is that you can use duplicate label names in a different chapter, but as you are using CHID, the it will be labeled differently. Use the CHID defined for the chapter in the corresponding chapter.tex in 'sources' folder. Generate new codes if need be.

This is a paragraph with a name.

1.2 Bibliography

Keep all your bibtex in 'bibphd.bib' file in the 'sources' folder. Unique identifier is needed *e.g.,* [1].

1.3 Extra contents

1.3.1 Figures

An example figure is shown in Figure 1.

1.3.2 Tables

An example table is shown in Table I.
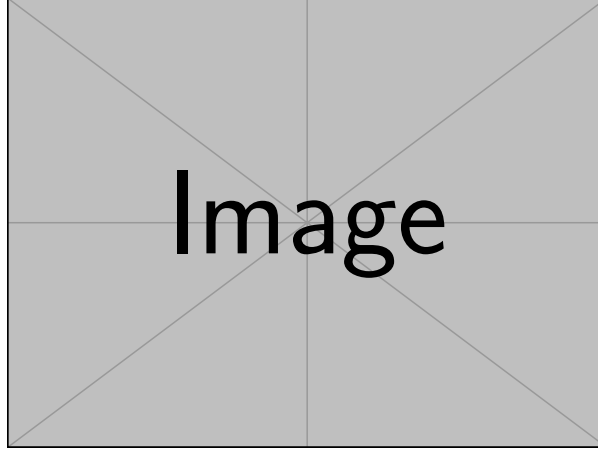
1.3.3 Algorithms

An example table is shown in Algorithm 1.

Figure 1. An example figure

TABLE I

AN EXAMPLE TABLE

Notation	Title A	Title B
P_{Text}	Some text	Some more text
S_{Text}	Some text	Some more text
S_{Text}	Some text	Some more text

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Algorithm 1 EXAMPLEALGORITHM

Require: var1, var2, N
Ensure: var1 $\leftarrow$ 1, var2 $\leftarrow$ 1, flag $\leftarrow$ 0
Input: var1, var2, N
Initialize: var1 $\leftarrow$ 1, var2 $\leftarrow$ 1, flag $\leftarrow$ 0
Output: var3   ▷ All five commands are equally valid
 1: **repeat**   ▷ Example: `repeat`
 2:     SOMESTEPS
 3: **until** SOMECONDITIONISMET
 4: **for** $i = 0$ **to** 10 **do**   ▷ Example: `for` loop
 5:     SOMESTEPSFORLOOP
 6: **end for**
 7: **while** flag **do**   ▷ Example: `while` loop
 8:     var1 $\leftarrow$ DOSOMESHIT
 9:     var2 $\leftarrow$ DOSOMEMORESHIT
10: **end while**
11: **loop**   ▷ Example: `loop`
12:     SOMEINFINITELOOPSTUFF
13: **end loop**
14: **if** var1 $< N$ **then**   ▷ Example: `if-else if- else`
15:     flag $\leftarrow$ 1
16: **else if** var1 $= N$ **then**
17:     flag $\leftarrow$ 0
18: **else**
19:     var3 $\leftarrow$ var1 $+$ var2
20: **end if**
21: **print** some results
22: **return** var3

---

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Part I

Part I

I-A

Subpart I A

CHAPTER 2

PAPER I TITLE

Overview: Write abstract here.

Keywords: Write keywords here

2.1 Introduction

1. put figures in 'figures' folder

2. use '\CHID_' to label stuffs

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Figure 2. An example figure

Parts of this chapter is taken from published journal article

I-B

Subpart I B

CHAPTER 3

PAPER II TITLE

Overview: Write abstract here.

Keywords: Write keywords here

3.1   Introduction

1. put figures in 'figures' folder

2. use '\CHID_' to label stuffs

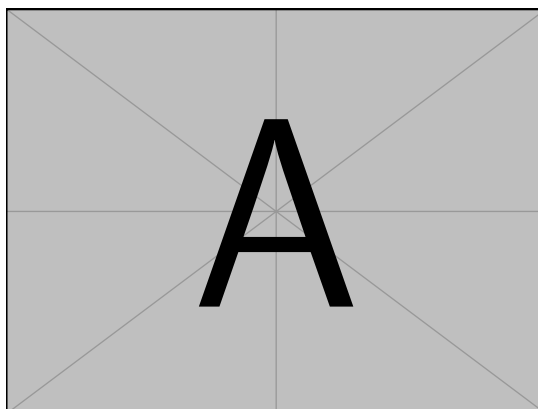3. put appendices in appendices.tex with appropriate CHID

Figure 3. An example figure

Parts of this chapter is taken from published journal article

Part II

Part II

II-A

Subpart II A

CHAPTER 4

PAPER III TITLE

Overview: Write abstract here.

Keywords: Write keywords here

4.1 Introduction

1. put figures in 'figures' folder

2. use '\CHID_' to label stuffs

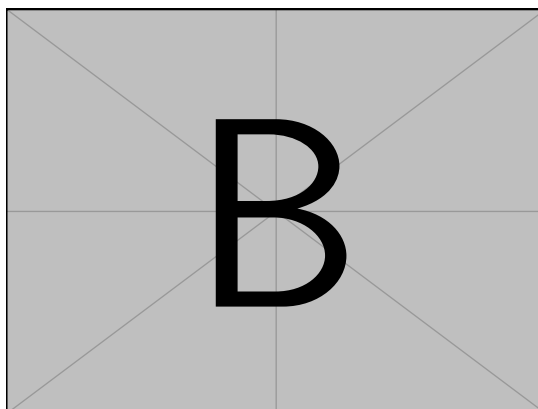3. put appendices in appendices.tex with appropriate CHID

Figure 4. An example figure

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parts of this chapter is taken from published journal article

II-B

Subpart II B

CHAPTER 5

PAPER IV TITLE

Overview: Write abstract here.

Keywords: Write keywords here

5.1 Introduction

1. put figures in 'figures' folder

2. use '\CHID_' to label stuffs

3. put appendices in appendices.tex with appropriate CHID

Figure 5. An example figure

Parts of this chapter is taken from published journal article

II-C

Subpart II C

CHAPTER 6

PAPER V TITLE

Overview: Write abstract here.

Keywords: Write keywords here

6.1 Introduction

1. put figures in 'figures' folder

2. use '\CHID_' to label stuffs

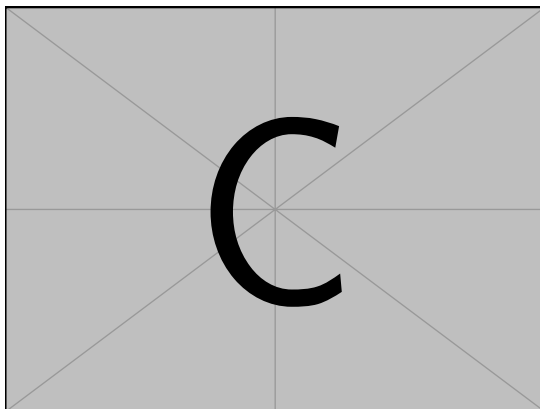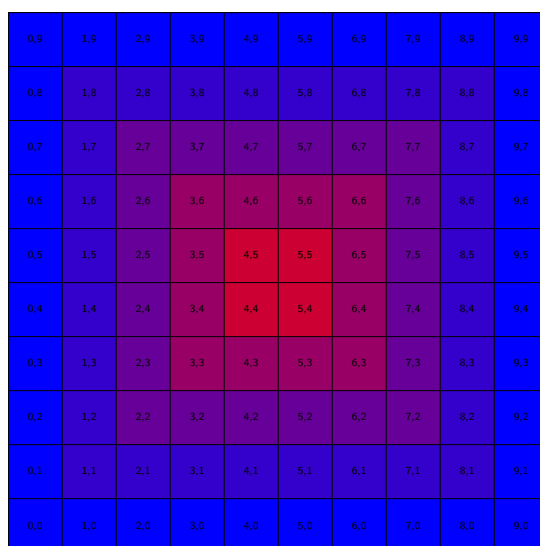3. put appendices in appendices.tex with appropriate CHID

Parts of this chapter is taken from published journal article

Figure 6. An example figure

CHAPTER 7

CONCLUSION

A conclusion is a good thing to have. Hopefully it is a good one!

APPENDICES

Appendix A

Proof of convergence

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Appendix B

Time-complexity analysis of the Algorithm

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Appendix C

Proof

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Sample Paper

Author: Sample name

Publication: IEEE Transactions on Signal Processing

Publisher: IEEE

Date: 19th July, 3021

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CITED LITERATURE

1. Grant, M. and Boyd, S.: CVX: Matlab software for disciplined convex programming, version 2.1. `http://cvxr.com/cvx`, March 2014.

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VITA

AUTHOR'S NAME

</div>

EDUCATION	text text
EXPERIENCE	position
PUBLICATIONS	**Journal Publications** paper 1 paper 2
	Conference Publications paper 1 paper 2 paper 3
PRESENTATIONS	**Invited Talks** 20XX IEEE Conference 20XX IEEE Conference
	Conference Presentations 20XX IEEE Conference 20XX IEEE Conference
	Poster Presentations 20XX IEEE Conference 20XX IEEE Conference
AWARDS	list...
MEMBERSHIPS	list...
SERVICES	list...

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