

University of Massachusetts Dartmouth

Thesis Title

A Thesis in
Data Science
by
Arnie Corsair

Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Science

May 2024

We approve the thesis of Arnie Corsair

Date of Signature

First-Name Last-Name
Professorial-title, Name of the the Department
Thesis Advisor

First-Name Last-Name
Professorial-title, Name of the the Department
Thesis Committee

First-Name Last-Name
Professorial-title, Name of the the Department
Thesis Committee

Scott Field
Graduate Program Director, Data Science

Jean VanderGheynst
Dean, College of Engineering

Tesfay Meressi
Associate Provost for Graduate Studies

Abstract

Thesis Title

by Arnie Corsair

umassdthesismsds.cls is a cheap hack of umassdthesis.cls for MS Data Science Thesis by commenting out lines 2265, 2272, and 2273 in the umassdthesis.cls. Basically, the hack is to remove the chair signature on the approval page since DS does not have a chair, only a program director (a joint program between COE and CAS). Please do not ask Grant about umassdthesismsds.cls. Only the original umassdthesis.cls

The file umassdthesis.cls is a modification of the standard L^AT_EX thesis class file. This particular class file incorporates all of the requirements of the University of Massachusetts Dartmouth for graduate level Master theses and Ph. D. dissertations, as well as undergraduate Honors and senior theses.

The thesis or dissertation must contain an abstract – a concise summary of the thesis or dissertation intended to inform a prospective reader about its contents. It usually includes a brief description of the problem investigated, the procedures or methods used, the findings, and the conclusions. It may use one or a few paragraphs; however, it is very rare that an abstract should use more than two pages, and many use just one page.

The `\abstract` command for the umassdthesis class has an optional argument of `long` for abstracts that go beyond a single page. The default is `short`.

Acknowledgements

Here's where you acknowledge all the people who helped you. It should probably include your thesis advisor as well as the senior students and post-docs who actually supervised your research project. Short and sweet is the best bet here, thank too many people and they're lost in the crowd. Mentioning your family and friends at this point is always a good idea since this is about as far as they'll ever get in reading your thesis.

Contents

List of Figures	vii
List of Tables	viii
Chapter 1 Introduction	1
1.1 Title of a Section	1
1.1.1 Title of a Subsection	1
1.2 Title of a Section	2
1.2.1 Title of a Subsection	2
Chapter 2 Title of Chapter 2	3
2.1 Title of a Section	3
2.1.1 Title of a Subsection	3
2.2 Title of a Section	3
2.2.1 Title of a Subsection	3
Chapter 3 Title of Chapter 3	4
3.1 Title of a Section	4
3.1.1 Title of a Subsection	5
3.2 Title of a Section	5
3.2.1 Title of a Subsection	5
Chapter 4 Title of Chapter 4	6
4.1 Title of a Section	6
4.1.1 Title of a Subsection	6
4.2 Title of a Section	6

4.2.1 Title of a Subsection	6
Appendix A Additional Material	7
A.1 Introduction	7
A.2 Appendictical Numbering	7
A.3 Getting the labels right	7
Appendix B The Second Appendix	8
B.1 A Section	8
B.2 Another Section	8
References	9

List of Figures

Figure 1.1: Caption for graphic	2
Figure 2.1: Caption for graphic	3
Figure 3.1: Caption for graphic	4
Figure 3.2: Caption for graphic	4
Figure 3.3: Caption for graphic	4
Figure 4.1: Put caption here	6

List of Tables

Table 4.1: Put caption for table here	6
---	---

Chapter 1 Introduction

A chapter can have sections and subsections. You can add as many as you need.

1.1 Title of a Section

Something to write in this section.

1.1.1 Title of a Subsection

Something to write in this subsection. For writing mathematics (equations, theorems, proofs, etc.), please read the User's Guide for the **amsmath** Package. An example of using the align environment along with the intertext is shown below.

$$A_1 = N_0(\lambda; \Omega') - \phi(\lambda; \Omega'), \quad (1.1)$$

$$A_2 = \phi(\lambda; \Omega') - \phi(\lambda; \Omega), \quad (1.2)$$

and

$$A_3 = \mathcal{N}(\lambda; \omega). \quad (1.3)$$

We can label an equation, too, and reference it.

$$\int_0^1 e^x dx = e - 1. \quad (1.4)$$

Equation (1.4) shows the integral of e^x over the interval $0 \leq x \leq 1$.

1.2 Title of a Section

Something to write in this section. Figure 1.1 illustrates an example of inserting a stand-alone graph.

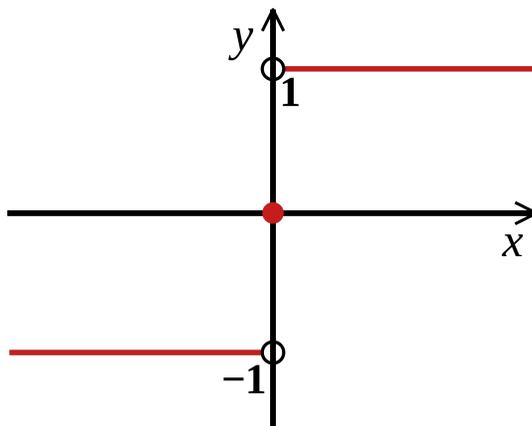


Figure 1.1: Caption for graphic

1.2.1 Title of a Subsection

Something to write in this subsection.

Chapter 2 Title of Chapter 2

A chapter can have sections and subsections. You can add as many as you need.

2.1 Title of a Section

Something to write in this section. An example of inserting two graphs with one caption can be seen in Figure 2.1.

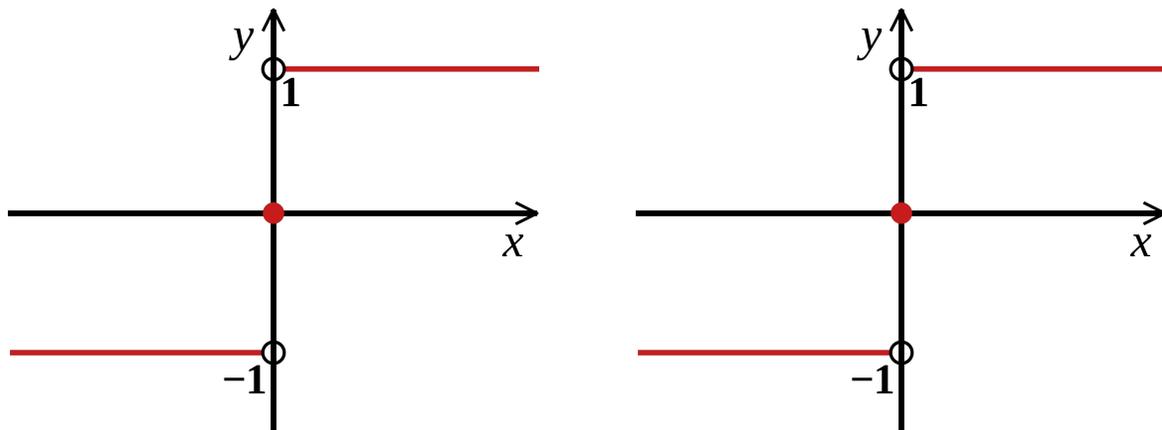


Figure 2.1: Caption for graphic

2.1.1 Title of a Subsection

Something to write in this subsection.

2.2 Title of a Section

Something to write in this section.

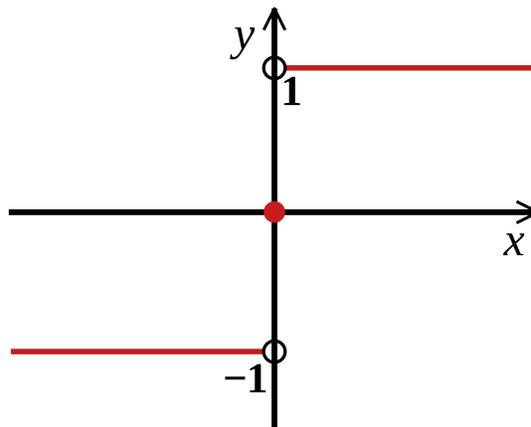
2.2.1 Title of a Subsection

Something to write in this subsection.

Chapter 3 Title of Chapter 3

A chapter can have sections and subsections. You can add as many as you need. An example of inserting a stand-alone graph with a caption on the left can be seen in Figure 3.1.

Figure 3.1: Caption for graphic



An example of inserting two graphs with two different captions can be seen in Figure 3.2 and Figure 3.3.

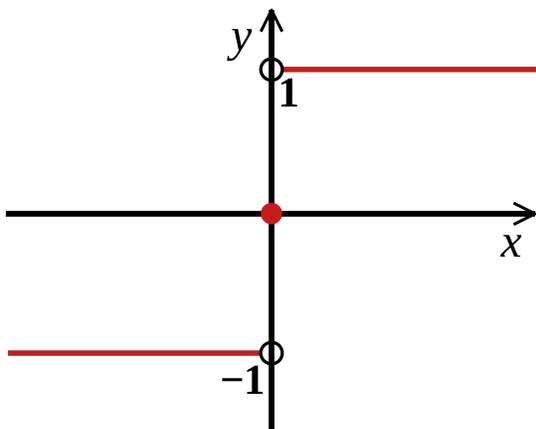


Figure 3.2: Caption for graphic

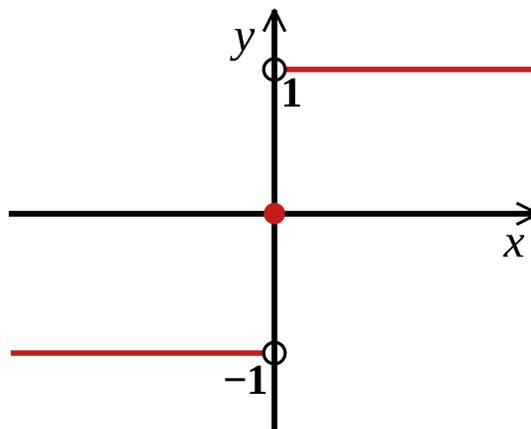


Figure 3.3: Caption for graphic

3.1 Title of a Section

Something to write in this section.

3.1.1 Title of a Subsection

Something to write in this subsection.

3.2 Title of a Section

Something to write in this section.

3.2.1 Title of a Subsection

Something to write in this subsection.

Chapter 4 Title of Chapter 4

A chapter can have sections and subsections. You can add as many as you need. An example of inserting a graph and a table side by side with two different captions can be seen in Table 4.1 and Figure 4.1.

n	$ \cdot _\infty$	$t_\lambda(sec)$
5	1.802765996014689e-01	0.001410
10	3.699315545079440e-02	0.003316
20	3.626362118354209e-03	0.014435
30	4.462425364284428e-04	0.036919
40	5.832149101614448e-05	0.080982
50	8.373242851966722e-06	0.152643
60	1.294515106553540e-06	0.256228

Table 4.1: Put caption for table here

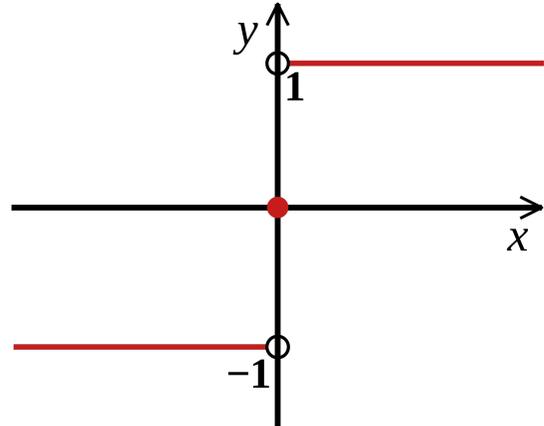


Figure 4.1: Put caption here

4.1 Title of a Section

Something to write in this section. All your references are stored in .bib files. In this example, references.bib. We can cite one of the references [1] in that file.

4.1.1 Title of a Subsection

Something to write in this subsection.

4.2 Title of a Section

Something to write in this section.

4.2.1 Title of a Subsection

Something to write in this subsection.

Appendix A Additional Material

A.1 Introduction

This is a sample appendix. By adding the command `\appendix` to the `LATEX` file before this file is included, the Table of Contents will reflect the appendical nature now attained.

A.2 Appendical Numbering

Appendices are labeled alphabetically rather than numerically as with chapters. Each is identified separately as “Appendix A”, “Appendix B”, and so forth.

A.3 Getting the labels right . . .

Sections in the first appendix will be labeled A.1, A.2 etc. Similarly, subsections, equations, figures and tables will have a leading A. This will be reflected in the Table of Contents, List of Figures and List of Tables in the prologue pages.

Appendix B The Second Appendix

This is labeled Appendix B.

B.1 A Section

Sections within this are labeled B.1

B.2 Another Section

Additional sections are labeled B.2 ...

References

- [1] Nicholas J. Higham. *Handbook of writing for the mathematical sciences*. Society for Industrial and Applied Mathematics (SIAM), Philadelphia, PA, 1993.