Sample Thesis Title - Long, Wide, and Words Capitalized

An Abstract

of a

Dissertation Proposal

Presented to

the Faculty of the Department of Electrical and Computer Engineering

University of Houston

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

in Electrical Engineering

by

Maya K. Student

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Abstract

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Acknowledgements

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Chapter 1

Introduction

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book [1]. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

(1) List item 1 that tabulates the information

(2) Second list item

(3) Another list item

(4) last list item

Contrary to popular belief, Lorem Ipsum is not simply random text. It has roots in a piece of classical Latin literature from 45 BC, making it over 2000 years old. Richard McClintock, a Latin professor at Hampden-Sydney College in Virginia, looked up one of the more obscure Latin words, consectetur, from a Lorem Ipsum passage, and going through the cites of the word in classical literature, discovered the undoubtable source. Lorem Ipsum comes from sections 1.10.32 and 1.10.33 of "de Finibus Bonorum et Malorum" (The Extremes of Good and Evil) by Cicero, written in 45 BC. This book is a treatise on the theory of ethics, very popular during the Renaissance. The first line of Lorem Ipsum, "Lorem ipsum dolor sit amet..", comes from a line in section

1.10.32.

The standard chunk of Lorem Ipsum used since the 1500s is reproduced below for those interested. Sections 1.10.32 and 1.10.33 from "de Finibus Bonorum et Malorum" by Cicero are also reproduced in their exact original form, accompanied by English versions from the 1914 translation by H. Rackham.
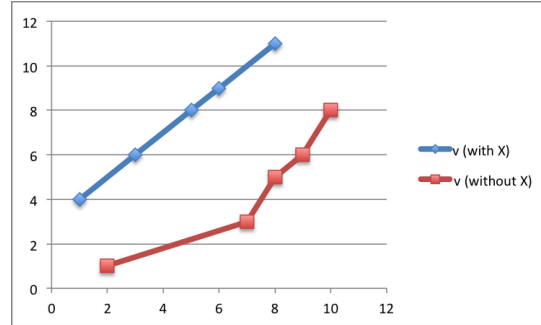
Figure 1.1. A sample graph image

1.1 Subfig test

(a) First fig.
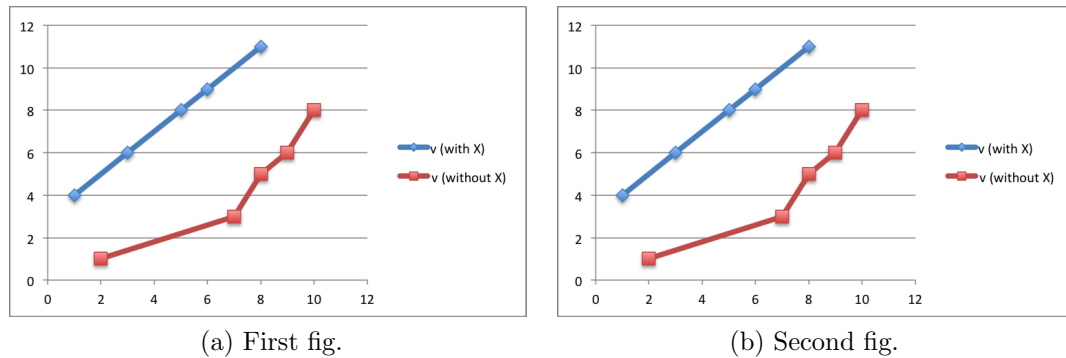

(b) Second fig.

Figure 1.2. A sample of two sub figures. The two different figures are combines by the `subfloat` package. This figure has an extreme long caption for verifying whether the hanging paragraph of the single-spacing caption works.

Try to ref Figure 1.2, and Figure 1.2a.

Table 1.1. Example table.

	Col 1	Col 2	Col 3	Col 4
$\mathcal{L}_a$	1	2	3	4
$\mathcal{L}_b$	5	6	7	8

1.2 Formulation test

Test the following formulation. No comma should be used if there are only two equations:

$$\frac{\partial \mathcal{L}(\mathbf{w},\ b)}{\partial \mathbf{w}} = \mathbf{w} + C \sum_i \frac{\partial \ell_i}{\partial \mathbf{w}} \tag{1.1-1}$$

$$\text{and } \frac{\partial \mathcal{L}(\mathbf{w},\ b)}{\partial b} = C \sum_i \frac{\partial \ell_i}{\partial b}, \tag{1.1-2}$$

where the gradients are used in support vector machine.

However, when there are more than 2 equations, commas should be used:

$$\arg\min_{\Theta} \frac{1}{N_{tr}} \sum_{i=1}^{N_{tr}} \mathcal{L}\left(\mathbf{d}_{HF}^{(i)}, \mathbf{d}_{LF}^{(i)}\right) + \frac{\lambda/2}{N_{tr}} \sum_{i=1}^{N_{tr}} \mathcal{R}\left(\mathbf{d}_{HF}^{(i)}\right) + \frac{\lambda/2}{N_{ts}} \sum_{i=1}^{N_{ts}} \mathcal{R}\left(\mathbf{d}^{(i)}\right),$$

$$\mathcal{L}\left(\mathbf{d}_{HF}, \mathbf{d}_{LF}\right) = \|\mathcal{D}_{\Theta}\left(\mathbf{d}_{HF}\right) - \mathbf{d}_{LF}\|_2^2, \tag{1.2}$$

$$\text{and } \mathcal{R}\left(\mathbf{d}\right) = \|\mathcal{D}_{\Theta}\left(\mathbf{d}\right) - \Psi\left(\mathcal{D}_{\Theta}\left(\mathbf{d}\right)\right)\|_2^2.$$

Try to refer the equations like this: (1.1-2).

1.3 Table test

The title of the table should appear on the top of Table 1.1.

1.4 A Sample subsection

It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of using Lorem Ipsum is that it has a more-or-less normal distribution of letters, as opposed to using 'Content here, content

here', making it look like readable English [2]. Many desktop publishing packages and web page editors now use Lorem Ipsum as their default model text, and a search for 'lorem ipsum' will uncover many web sites still in their infancy. Various versions have evolved over the years, sometimes by accident, sometimes on purpose (injected humour and the like).
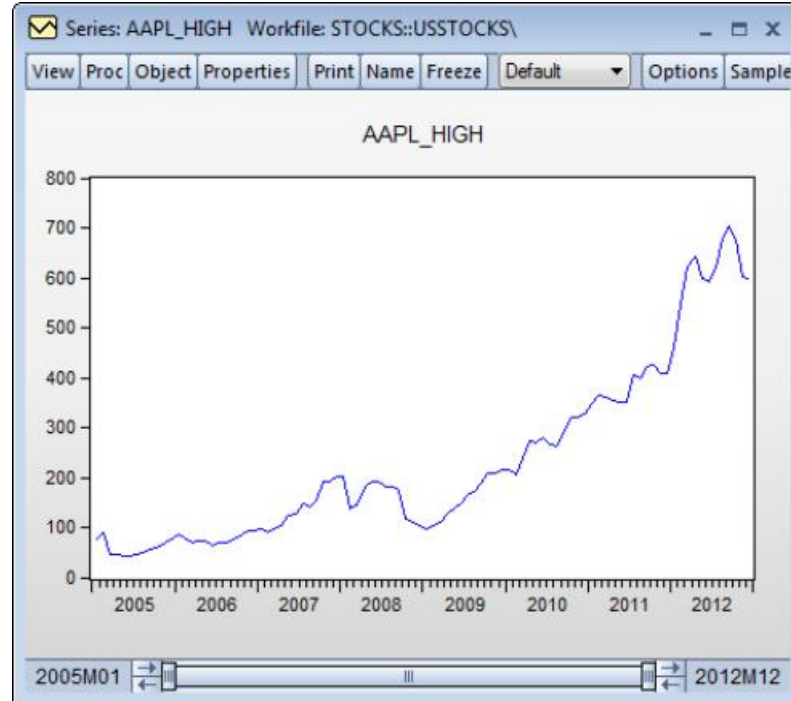

Figure 1.3. Another plot image

1.5 Another subsection

There are many variations of passages of Lorem Ipsum available, but the majority have suffered alteration in some form, by injected humour, or randomised words which don't look even slightly believable. If you are going to use a passage of Lorem Ipsum, you need to be sure there isn't anything embarrassing hidden in the middle of text. All the Lorem Ipsum generators on the Internet tend to repeat predefined chunks as necessary, making this the first true generator on the Internet. It uses a dictionary of over 200 Latin words, combined with a handful of model sentence

4

structures, to generate Lorem Ipsum which looks reasonable. The generated Lorem Ipsum is therefore always free from repetition, injected humour, or non-characteristic words etc.

Chapter 2

A New Section - Such as Related Work

Duis aliquam hendrerit nunc vitae euismod. Nam in laoreet ante. Vestibulum nec purus eget urna varius commodo luctus in lacus. Quisque eu nisl dui. Maecenas sagittis rutrum ante id imperdiet. Sed semper odio vel est bibendum commodo. Vivamus lacinia facilisis ante. Etiam venenatis at eros eu sollicitudin. Proin aliquet, neque in suscipit finibus, purus mi elementum est, finibus elementum libero turpis faucibus nibh. Proin orci arcu, euismod a lacinia vel, porta a turpis [3].

2.1 The subsection – about a Toolkit

Praesent eget neque ac tortor finibus hendrerit et eu mauris. Nam quis finibus risus, ac tristique turpis. Curabitur non mauris eget sapien eleifend scelerisque lobortis eu lacus. Sed metus augue, volutpat id tristique in, ultrices in massa. Donec et dui in massa rhoncus scelerisque. Nunc luctus dui sed ullamcorper molestie. Phasellus efficitur nec est sit amet dignissim. In convallis orci ac urna maximus, et congue nisl lobortis.

2.2 Internals of the toolkit

Sed facilisis commodo leo, id interdum est. Vivamus ultricies pharetra tortor, nec imperdiet enim mattis non. Duis sagittis sem ut urna sodales semper. Vestibulum ullamcorper dui at libero faucibus vulputate at nec nulla. Fusce justo est, maximus eu commodo sed, sagittis dictum felis. Integer id velit ac ipsum volutpat bibendum. Nunc dictum pretium eros, tincidunt sodales enim porta a.

Another list can go like this, and more explanations can be added [4].
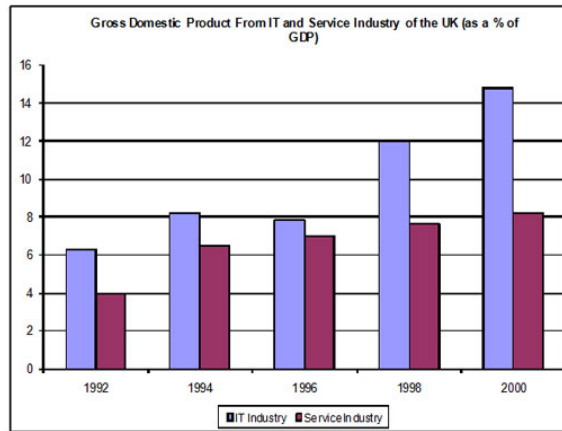
(1) Connectivity protocols

(2) Resource protocols

Gross Domestic Product From IT and Service Industry of the UK (as a % of GDP)

16

14

12

10

8

6

4

2

0

1992   1994   1996   1998   2000

■ IT Industry ■ Service Industry

Figure 2.1. Some Bar Chart

(3) Collective protocols

2.3   Services and Technologies

Vestibulum tempus ipsum in gravida hendrerit. Donec vehicula mi a rhoncus pellentesque. Morbi sit amet vestibulum tortor. Nulla facilisi. Nulla felis velit, accumsan maximus ornare sit amet, congue a dolor. Mauris quis pulvinar justo. Phasellus nec consequat tellus. Ut tempor venenatis risus. Nam sit amet mauris tincidunt leo porttitor tempor. Nam at urna ac leo fringilla accumsan. Morbi eu tristique ligula. Cras ut pellentesque orci. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Duis suscipit nunc diam, vitae semper nibh maximus rhoncus. Donec pharetra elit viverra sapien elementum aliquet. Duis hendrerit quam elit, in pretium enim ultricies ac.

2.3.1   An example for sub-sub-section

Etiam risus ante, viverra vel diam sed, eleifend blandit quam. Vivamus quis gravida arcu. Fusce ac est ut velit maximus pellentesque vitae quis massa. Aenean eget tortor nisi. Phasellus hendrerit nibh sit amet dolor molestie interdum vel a lacus. Nam est leo, consequat id nibh ac, molestie facilisis velit. Cras at urna nisl.

2.4 Programming Section

Praesent in feugiat turpis, et laoreet turpis. Etiam lobortis, metus sit amet iaculis tincidunt, velit orci porta magna, vitae faucibus arcu orci nec justo. Morbi quis elit non massa tincidunt ornare ullamcorper quis mauris. Vivamus nec sollicitudin tortor, venenatis cursus mi. Donec at turpis non leo euismod hendrerit vulputate et tortor. Quisque malesuada lectus vitae orci condimentum sagittis. Nunc ut ligula a eros venenatis pretium

Sample Mathematical Explanation

(1) P $\xrightarrow{getPK(R)}$ GSM_u

1.1 $GSM_u \xrightarrow{R}$ GSM_R

1.2 $GSM_u \xleftarrow{PK_R}$ GSM_R

(2) P $\xleftarrow{PK_R}$ GSM_u

(3) P $\xrightarrow{C=Enc_{PK_R}(M)}$ R

(4) P $\xleftarrow{M}$ R

(5) P considers R authenticated

Chapter 3

Conclusions

In odio metus, pellentesque vitae tellus sed, bibendum cursus tortor. Vestibulum nec nunc non felis aliquet luctus vitae porta massa. Cras eu venenatis odio, cursus ultricies purus. Vestibulum ac blandit nibh, vitae porttitor ipsum. Nullam vestibulum sagittis metus, ut rutrum est vehicula non. Duis interdum tempor est non posuere. Curabitur metus mauris, elementum sit amet augue a, sollicitudin sodales arcu.

Nulla congue at odio egestas fringilla. Quisque sollicitudin ante non sem facilisis pharetra. Vivamus ut augue gravida, suscipit augue quis, eleifend augue. Sed finibus finibus magna quis luctus. Cras cursus, nisl in commodo venenatis, neque ipsum interdum sem, at venenatis lacus dolor vel mauris. Etiam elementum nibh tristique justo pellentesque, ut pulvinar dolor dictum. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Aenean non ligula ac justo consequat aliquet. Maecenas rhoncus sapien nec justo condimentum, ac varius lacus ullamcorper. Aliquam erat volutpat. Etiam posuere justo a eleifend porttitor. Nulla eu elit pellentesque, feugiat metus nec, fringilla ligula. Ut nibh lorem, tempus at convallis sed, pharetra at metus. Curabitur id purus porttitor, ultricies tortor a, tincidunt ligula. Mauris felis elit, sodales ac sollicitudin id, tincidunt a quam.

References

[1] B. Allcock, J. Bester, J. Bresnahan, A. L. Chervenak, I. Foster, C. Kesselman, S. Meder, V. Nefedova, D. Quesnel, and S. Tuecke, "Data management and transfer in high-performance computational grid environments," *Parallel computing*, vol. 28, no. 5, pp. 749–771, 2002.

[2] J. Bester, I. Foster, C. Kesselman, J. Tedesco, and S. Tuecke, "Gass: A data movement and access service for wide area computing systems," in *Proceedings of the Sixth workshop on I/O in Parallel and Distributed Systems*, 1999, pp. 78–88.

[3] F. D. Berman, R. Wolski, S. Figueira, J. Schopf, and G. Shao, "Application-level scheduling on distributed heterogeneous networks," in *Proceedings of the 1996 ACM/IEEE conference on Supercomputing*, 1996, 39–es.

[4] F. Berman and R. Wolski, "The apples project: A status report," in *Proceedings of the 8th NEC Research Symposium*, Citeseer, vol. 16, 1997.

Appendix A

More details

A.1 Extra 1

In odio metus, pellentesque vitae tellus sed, bibendum cursus tortor. Vestibulum nec nunc non felis aliquet luctus vitae porta massa. Cras eu venenatis odio, cursus ultricies purus. Vestibulum ac blandit nibh, vitae porttitor ipsum. Nullam vestibulum sagittis metus, ut rutrum est vehicula non. Duis interdum tempor est non posuere. Curabitur metus mauris, elementum sit amet augue a, sollicitudin sodales arcu.

A.2 Extra 2

Nulla congue at odio egestas fringilla. Quisque sollicitudin ante non sem facilisis pharetra. Vivamus ut augue gravida, suscipit augue quis, eleifend augue. Sed finibus finibus magna quis luctus. Cras cursus, nisl in commodo venenatis, neque ipsum interdum sem, at venenatis lacus dolor vel mauris. Etiam elementum nibh tristique justo pellentesque, ut pulvinar dolor dictum. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Aenean non ligula ac justo consequat aliquet. Maecenas rhoncus sapien nec justo condimentum, ac varius lacus ullamcorper. Aliquam erat volutpat. Etiam posuere justo a eleifend porttitor. Nulla eu elit pellentesque, feugiat metus nec, fringilla ligula. Ut nibh lorem, tempus at convallis sed, pharetra at metus. Curabitur id purus porttitor, ultricies tortor a, tincidunt ligula. Mauris felis elit, sodales ac sollicitudin id, tincidunt a quam.