

Your Great Title For Your Thesis

A THESIS
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA
BY

Pete Willemsen

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF SCIENCE

The Doctor

October 2019

© Pete Willemsen 2019

Acknowledgements

Some acks are nice.

Dedication

Your dedication goes here.

Abstract

This thesis examines the use of interactive immersive displays for exploring urban design data. Exploratory interfaces that utilizes human center algorithms will convey more information.

Contents

Contents	iv
List of Tables	vi
List of Figures	vii
1 Introduction	1
2 Background	2
2.1 Background	2
2.1.1 Robot Interfaces	2
2.2 Previous Work	2
3 Implementation	4
3.1 First section	4
3.2 Initial Section	4
3.2.1 Subsection One	5
3.2.2 Subsection Two	5
3.2.3 Subsection Three	5
3.3 New Section For Next Important Topic	5
3.3.1 Algorithm Initialization	5

3.3.2	Atomic Operations	5
3.3.3	Programming Style	6
4	Results	7
5	Conclusions	9
A	Appendix A	10
	References	11

List of Tables

4.1	Illustrates the relationship between variables and the related experiment conditions.	8
-----	---	---

List of Figures

3.1	Clear and concise figure captions are important to write. This one illustrates the cycle of a graph.	4
4.1	Good data.	7

1 Introduction

It's always good to introduce your (1) problem, (2) why it is interesting, (3) what you did, and (4) roughly, how well did it work. You might even have citations in here, as in this paper Takashi Asawa [2007](#).

2 Background

2.1 Background

In this work, we investigate human computer interaction.

2.1.1 Robot Interfaces

In seminar today, we looked for papers on the ACM Digital Library. The following paper is about virtual reality (Kreylos et al. [2006](#)), whereas this paper investigates robotics issues (Drascic, Milgram, and Grodski [1989](#)).

2.2 Previous Work

Previous work by Ranga in this area focused on measurement of peer to peer sysmtes and found that citeranga15. This thesis will build upon Ranga's work by exploiring t.....

A new article showed that ultization is.... (Abbasi and Ghaderi [2013](#)). Deep learning is everywhere (Tang et al. [2019](#)).

??? [N.d.](#)

[1](#)

In seminar today, we looked for papers on the ACM Digital Library. The following paper is about virtual reality (Kreylos et al. [2006](#)).

¹This information found on www.resilio.com on Oct 20, 2016.

Found another paper... think the tile has VRGP in it... make sure to read.

3 Implementation

3.1 First section

You may need a nice figure, which you can algorithmically render using the Tikz package. You should really check out the Texample web site where several nice tikz examples are provided (<http://www.texample.net/tikz/examples/all/>).

3.2 Initial Section

- What language am I doing this in?
- What is the question the urban planner want solved?

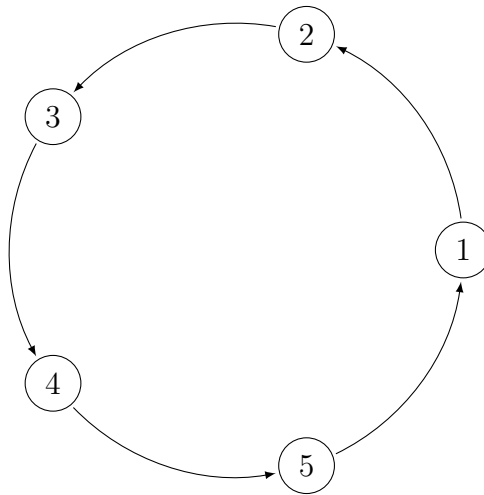


Figure 3.1: Clear and concise figure captions are important to write. This one illustrates the cycle of a graph.

Math is really nice with L^AT_EXtoo!

$$L_s(\vec{k}_o) = L_e(\vec{k}_o) \int_{\text{all } \vec{k}_i} \rho(\vec{k}_i, \vec{k}_o) L_f(\vec{k}_i) \cos \theta_i d\sigma_i$$

1. What language am I doing this in?
2. What is the question the urban planner want solved?
3. new item
 - new 1
 - new 2

A graph rendered with the Tikz package is shown in [Figure 3.1](#).

3.2.1 Subsection One

3.2.2 Subsection Two

3.2.3 Subsection Three

3.3 New Section For Next Important Topic

3.3.1 Algorithm Initialization

3.3.2 Atomic Operations

You may even need code in your thesis. Here is a way to nicely include code with L^AT_EX using the listings package.

```
1 for (unsigned int idx=0; idx<maxSize; idx++) {  
2     atomic_add( idx );  
3 }
```

3.3.3 Programming Style

Explaining Fine Detail Here

TODO: Make sure to finish this!

Last Subsection

4 Results

Your results. This worked great. Here's a plot to show how great it worked.

TODO: Need to get results!!!! Make sure to finish this!

We can reference the plot in Figure 4.1. Also, it's sometimes nice to include tables.

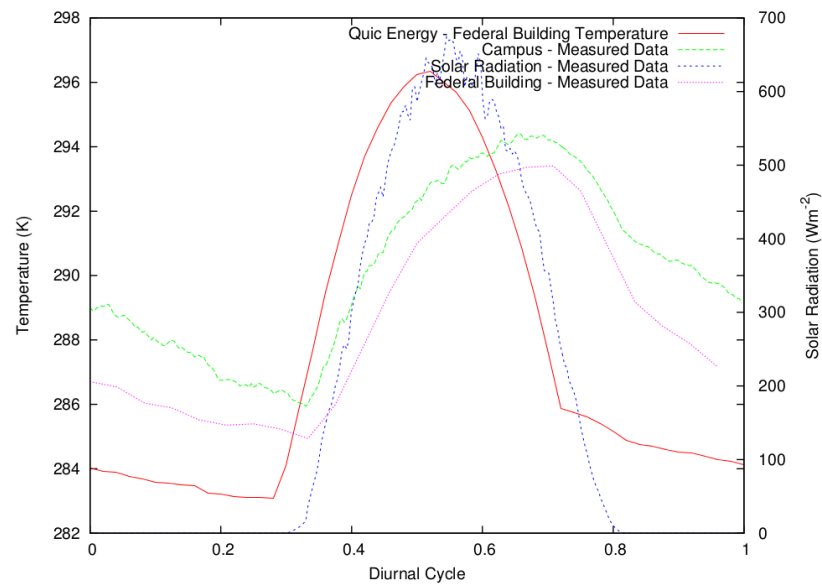


Figure 4.1: Good data.

Variable	Condition 1	Condition 2
<i>arc</i>	1.796	0.304
<i>boo</i>	3.112	0.411
<i>gar</i>	4.344	0.629

Table 4.1: Illustrates the relationship between variables and the related experiment conditions.

5 Conclusions

How can you wrap this up?

A Appendix A

Do you need an Appendix? You can include several of them if you want.

References

??? (N.d.). *article tittle*. Website. Website describing... (cit. on p. 2).

Abbasi, Ali and Majid Ghaderi (2013). “Distributed Base Station Activation for Energy-efficient Operation of Cellular Networks”. In: *Proceedings of the 16th ACM International Conference on Modeling, Analysis & Simulation of Wireless and Mobile Systems*. MSWiM ’13. Barcelona, Spain: ACM, pp. 427–436. ISBN: 978-1-4503-2353-6. DOI: [10.1145/2507924.2507961](https://doi.org/10.1145/2507924.2507961). URL: <http://doi.acm.org/10.1145/2507924.2507961> (cit. on p. 2).

Drascic, D., P. Milgram, and J. Grodski (Nov. 1989). “Learning effects in telemanipulation with monoscopic versus stereoscopic remote viewing”. In: *Systems, Man and Cybernetics, 1989. Conference Proceedings., IEEE International Conference on*, 1244–1249 vol.3. DOI: [10.1109/ICSMC.1989.71502](https://doi.org/10.1109/ICSMC.1989.71502) (cit. on p. 2).

Kreylos, Oliver et al. (2006). “Enabling Scientific Workflows in Virtual Reality”. In: *Proceedings of the 2006 ACM International Conference on Virtual Reality Continuum and Its Applications*. VRCIA ’06. Hong Kong, China: ACM, pp. 155–162. ISBN: 1-59593-324-7. DOI: [10.1145/1128923.1128948](https://doi.org/10.1145/1128923.1128948). URL: <http://doi.acm.org/10.1145/1128923.1128948> (cit. on p. 2).

Takashi Asawa Akira Hoyanob, Kazuaki Nakaohkubo (Dec. 2007). “Thermal design tool for outdoor spaces based on heat balance simulation using a 3D-CAD system”. In: *Building and Environment* 43.1, pp. 2112–2123 (cit. on p. 1).

Tang, Yibin et al. (Oct. 2019). “MV-Net: Toward Real-Time Deep Learning on Mobile GPGPU Systems”. In: *J. Emerg. Technol. Comput. Syst.* 15.4, 35:1–35:25. ISSN: 1550-4832. DOI: [10 . 1145 / 3358696](https://doi.org/10.1145/3358696). URL: [http : // doi . acm . org / 10 . 1145 / 3358696](http://doi.acm.org/10.1145/3358696).