#### AIM LAB SAMPLE DISSERTATION TEMPLATE

by

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# Abstract

This is abstract.

# Acknowledgments

I would like to express my gratitude to everybody in the world.

# Dedication

This dissertation is dedicated to everybody in the world.

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## Acronyms

MRI Magnetic Resonance Imaging

NIH National Institutes of Health

 ${f SNR}$  Signal-to-Noise Ratio

# Chapter 1

## Introduction

"All children are artists. The problem is how to remain an artist once he grows up." (This is not necessary if you don't want it.)

Pablo Picasso

This is the introduction.

## 1.1 Background

This is the background of introduction.

### 1.1.1 Sub Section 1

This is the sub section 1 of background.

### 1.1.2 Sub Section 2

This is the sub section 2 of background.

### 1.2 Literature Review

This is the Literature Review Section. Here is a figure: Fig.1.1 and here is a table: Table 1.1.

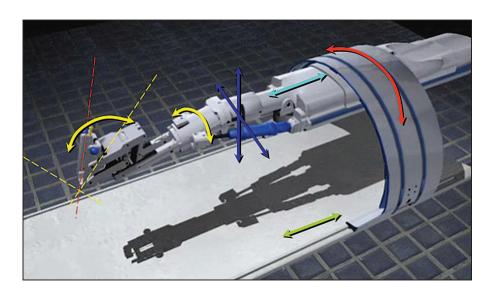


Figure 1.1: This is a sample figure with a sample citation [1] ©2008 IEEE.

Table 1.1: Detailed scan parameters for each of four protocols for compatibility evaluation

Protocol	TE (ms)	TR (ms)	FA (deg)	Slice thickness (mm)	FOV (mmxmm)	Bandwidth (Hz/pixel)
T1-weighted FFE	2.02	12	75	2	256x256	399
T2-weighted 2D TSE, initial scan	100	4800	90	3	256x240	203
T2-weighted 2D TSE, needle	106	3030	90	3	256x243	260
Balanced FFE, real-time	1.98	3.96	10	5	256x230	908

### 1.3 Dissertation Contributions

• Contribution 1

Contribution 1

• Contribution 2

Contribution 2

• Contribution 3

Contribution 3

### 1.4 Dissertation Overview

This introductory chapter presents ...

Chapter 2 introduces  $\dots$ 

Chapter 3 describes  $\dots$ 

Chapter 4 presents ...

Chapter 5 summarizes  $\dots$ 

Chapter 6 presents ...

We conclude and discuss future work in Chapter 7.

# Chapter 2

# My Work

"Veni, vidi, vici."

\_\_\_\_\_\_\_
Julius Caesar

This chapter introduces ...

### 2.1 Introduction

This is the introduction.

### 2.1.1 Sub Section 1

This is the sub section 1 of intro.

#### 2.1.2 Sub Section 2

This is the sub section 2 of intro.

### 2.2 My Work Part 1

This is part 1 of my work.

### 2.3 My Work Part 2

This is part 2 of my work.

## 2.4 My Work Part 3

This is part 3 of my work.

### 2.5 Discussion and Conclusions

This is the discussion and conclusions for this section.

## Chapter 3

### Conclusions and Future Extension

"Prediction is very difficult,
especially about the future."

Niels Bohr

This dissertation discussed ...

### 3.1 Summary of Work and Contributions

An overview of this work is presented below with a summary of contributions and lessons learned along the way.

• Contribution 1

Contribution 1

• Contribution 2

Contribution 2

#### • Contribution 3

Contribution 3

## 3.2 Impact and Future Work

The research presented in this dissertation addresses several major challenges.

#### Impact

Here is the impact of my work.

#### Lessons Learned

Some lessons I've learned.

#### **Future Work**

Future work includes...

## References

[1] G. S. Fischer, I. I. Iordachita, C. Csoma, J. Tokuda, S. P. DiMaio, C. M. Tempany, N. Hata, and G. Fichtinger, "MRI-Compatible Pneumatic Robot for Transperineal Prostate Needle Placement," *IEEE/ASME Transactions on Mechatronics*, vol. 13, no. 3, 2008.