

**TITLE OF YOUR THESIS  
ON SEVERAL LINES IF NEEDED**

A DISSERTATION  
PRESENTED TO  
THE ACADEMIC FACULTY

By

Your Name

IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE  
DOCTOR OF PHILOSOPHY IN THE  
SCHOOL OF MECHANICAL ENGINEERING

Georgia Institute of Technology

January 2020

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**TITLE OF YOUR THESIS  
ON SEVERAL LINES IF NEEDED**

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It is my belief that nearly any invented quotation, played with confidence,  
stands a good chance to deceive.

—*Mark Twain*

To Ted Striker,  
whose valour and bravery  
shall not be forgotten

# Acknowledgements

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## SUMMARY

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# Chapter 1

## Introduction and Background

### 1.1 About this Template

This template is an adaptation gatechthesis\_latex template (17 January 2017 update) and ut-diss-2. I’ve made some (mostly) aesthetic changes, but I believe it should conform to the requirements listed in the Georgia Tech “Graduate Thesis/Dissertation Guidelines & Procedures” (April 2015 Update). It is by no means an official template, though. So as stated in the license file, you can use, change, distribute, sell it however you’d like, provided

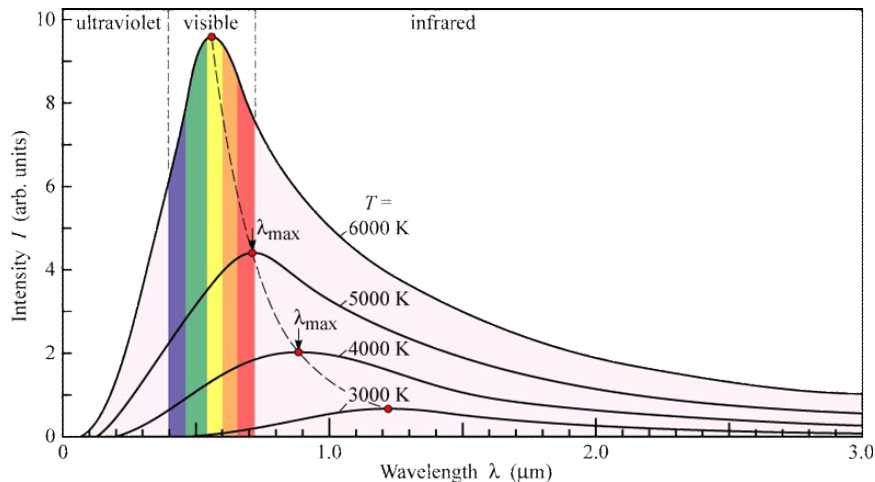
1. You include the copyright notice in the license file; and
2. You hold none of the authors liable for any results of such use.

### 1.2 Basic Elements

This section talks about common components (figures, tables, and equations), and how they’re included in L<sup>A</sup>T<sub>E</sub>X documents. Much better and more complete resources are available elsewhere, but hopefully this enough to get started.

#### 1.2.1 Figures

Figures are included with the `figure` environment. They are floats, which means that they will appear wherever L<sup>A</sup>T<sub>E</sub>X thinks is best based on the surrounding text. You can tinker with this positioning, but the details are out of scope. A quick example will give most of the salient details. The following code will give the results in Fig. 1.1.



**FIGURE 1.1:** This is a long caption. It's too long for the table of contents, so we specify a short caption in the brackets.

```
\begin{figure}
  \centering
  \includegraphics[width=0.75\linewidth]{figures/exampleFigure.png}
  \caption[Short Caption]{This is a long caption. It's too long
    for the table of contents, so we specify a short caption
    in the brackets.}
  \label{fig:IntensityVsWavelength}
\end{figure}
```

Note the use of a short caption in brackets in the `\caption` command. This lets us have a long explanatory caption, without keeping our List of Tables compact (compare the caption of Fig. 1.1) with how it's listed on page viii.

## 1.2.2 Tables

## 1.2.3 Equations

I recommend using the `align` environment exclusively for equations. It's virtually identical to `equation`, but allows you to have multiple lines and specify where you want them to—well—*align* with each other. Compare the following

```
\begin{equation}
  a^{2} + b^{2} = c^{2}
\end{equation}
```

$$a^2 + b^2 = c^2 \quad (1.1)$$

```
\begin{align}
  a^{2} + b^{2} = c^{2}
\end{align}
```

$$a^2 + b^2 = c^2 \quad (1.2)$$

## 1.3 Cross-Referencing

One of the chief advantages of  $\text{\LaTeX}$  is how easy it makes cross-references. Note that we often want to refer to a figure or equation. Sure, we could number them by hand, but if we insert or delete

Items are referenced using `cleveref` and `hyperref` packages. For example, here's an equation

$$i\hbar\frac{\partial}{\partial t}\Psi = \left[ \frac{-\hbar^2}{2m}\nabla^2 + V \right] \Psi. \quad (1.3)$$

Equation (1.3) should be referenced as so.

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**TABLE 1.1:** This is an example Table.

$x$	$f(x)$	$g(x)$
1	6	4
2	6	3
3	6	2
4	6	2

incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.<sup>1</sup> Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.<sup>2</sup> Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

## **Chapter 2**

### **Technical Approach**

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

#### **2.1 Section**

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

This is the second paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

And after the second paragraph follows the third paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

After this fourth paragraph, we start a new paragraph sequence. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

### **2.1.1 Example Subsection**

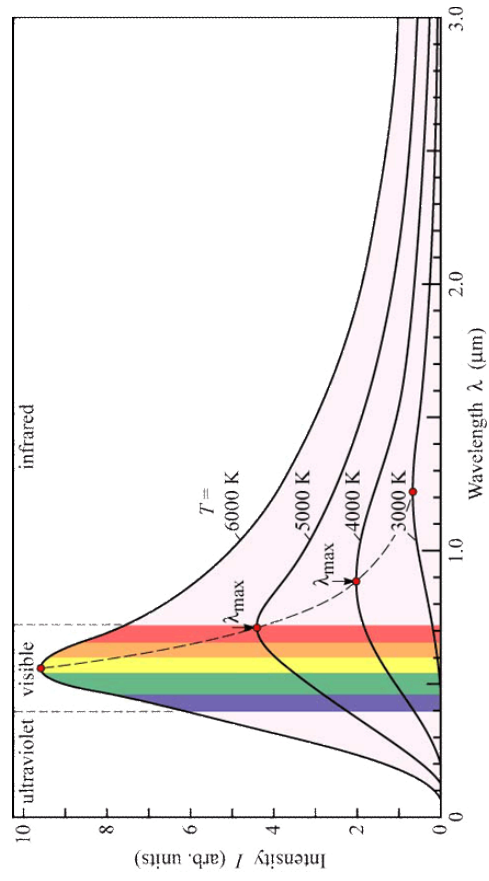
Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.



#### **2.1.1.1 Example Subsubsection**

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

#### **2.2 God, *Another* Section???**



**FIGURE 2.1:** This is another example Figure, rotated to landscape orientation.

## **Chapter 3**

### **Results**

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## **Chapter 4**

### **Discussion**

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## **Chapter 5**

### **Conclusion**

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# **Appendices**

# **Appendix A**

## **Experimental Equipment**

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$$a^2 + b^2 = c^2. \tag{A.1}$$

### **A.1 Section of Appendix**

## **Appendix B**

### **Data Processing**

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- [1] B. W. Kernighan and D. M. Ritchie, *The C Programming Language Second Edition* (Prentice-Hall, Inc.) (1988).
- [2] G. P. Burdell, *Myths and Their Origins Plus Some Extra Words to Make the Title Really Long and Extend to the Next Line* (Real Books, Inc.) (2017).

## **Vita**

Vita may be provided by doctoral students only. The length of the vita is preferably one page. It may include the place of birth and should be written in third person. This vita is similar to the author biography found on book jackets.