

**TOWSON UNIVERSITY
COLLEGE OF GRADUATE STUDIES**

**TITLE OF THESIS/DISSERTATION TYPED IN CAPITAL LETTERS
(DOUBLE SPACED AND CENTERED)
(INVERSE PYRAMID)**

by

(Student's Name Here)

A dissertation

Presented to the faculty

of Towson University

in partial fulfillment

of the requirements for the degree

Doctor of Philosophy

Department of Computer and Information Sciences

Towson University,

Towson, Maryland

21252

(Month Year of Graduation)

DISSERTATION APPROVAL PAGE

[Insert image/pdf of completed **Thesis/Dissertation Approval Page Form**]

Forms for the final approval of your thesis/dissertation by your committee need to be completed in DocuSign. The following DocuSign Forms are listed by the number of members serving on your committee. Please use the form that corresponds with your committee size. All students should complete the internet release form.

Thesis Completed Approval Form

[Post- defense Thesis Approval Page Form for Chair and 2 Members](#)

[Post- defense Thesis Approval Page Form for Chair and 3 Members](#)

[Post- defense Thesis Approval Page Form for Chair and 4 Members](#)

Dissertation Completed Approval Form

[Post- defense Dissertation Approval Page Form for Chair and 3 Members](#)

[Post- defense Dissertation Approval Page Form for Chair and 4 Members](#)

All Students:

Internet Release Form for Electronic Theses and Dissertations (ETDs)

[Internet Release Form for ETDs](#)

ACKNOWLEDGMENTS

Your text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel diam rutrum, maximus arcu nec, tempus magna. Praesent pretium, mauris eget euismod facilisis, libero lorem laoreet leo, at bibendum arcu massa at dui. Aliquam id felis mi. Vivamus egestas efficitur metus, sed semper libero facilisis in. Cras id scelerisque quam, sit amet dictum tellus. Integer porttitor laoreet iaculis. In hac habitasse platea dictumst. Nullam justo ante, lacinia in tristique sed, vehicula in purus. Phasellus condimentum dapibus mauris, id molestie tortor. Nullam vel ante nulla. Etiam aliquam varius sem, sit amet luctus massa rhoncus in. Praesent eget ex nec lacus tincidunt facilisis nec id ligula. Quisque sollicitudin, massa vitae laoreet aliquam, tortor lacus condimentum ligula, vitae sodales velit mauris ut magna. Duis eleifend vulputate ultricies. Aliquam finibus, metus lobortis eleifend consequat, orci justo interdum felis, vitae blandit nisi ipsum vitae mi. Suspendisse vitae pulvinar justo. Nulla elementum eleifend nulla at finibus. Quisque molestie neque eget risus elementum, vel aliquam odio porttitor. Vivamus rhoncus pharetra leo, ut ultricies dolor. Curabitur vel lacinia diam, in laoreet justo. Duis scelerisque porta justo, quis lacinia nulla porta non. Proin ullamcorper enim at orci dignissim, et imperdiet metus ultrices. Nam interdum nulla tortor, viverra sollicitudin lectus convallis eu. Ut sed quam congue, ullamcorper nulla eget, mollis mauris. Vivamus sagittis quam leo, eu pulvinar enim eleifend a.

ABSTRACT

TITLE OF THESIS/DISSERTATION TYPED IN CAPITAL LETTERS

(DOUBLE SPACED AND CENTERED)

(INVERSE PYRAMID)

(Student's Name Here)

Your text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel diam rutrum, maximus arcu nec, tempus magna. Praesent pretium, mauris eget euismod facilisis, libero lorem laoreet leo, at bibendum arcu massa at dui. Aliquam id felis mi. Vivamus egestas efficitur metus, sed semper libero facilisis in. Cras id scelerisque quam, sit amet dictum tellus. Integer porttitor laoreet iaculis.

In hac habitasse platea dictumst. Nullam justo ante, lacinia in tristique sed, vehicula in purus. Phasellus condimentum dapibus mauris, id molestie tortor. Nullam vel ante nulla. Etiam aliquam varius sem, sit amet luctus massa rhoncus in. Praesent eget ex nec lacus tincidunt facilisis nec id ligula. Quisque sollicitudin, massa vitae laoreet aliquam, tortor lacus condimentum ligula, vitae sodales velit mauris ut magna. Duis eleifend vulputate ultricies.

TABLE OF CONTENTS

List of Tables	vi
List of Figures	vii
Keys to Symbols, Abbreviations, or Nomenclature.....	viii
Chapter I. How To Use This Template	1
1.1 Required Pages.....	1
1.2 Paragraph Styles	1
1.3 Table of Contents, List of Tables, and List of Figures	1
1.4 How to use references	1
Chapter II. IEEE Style Headings	2
2.1 IEEE Style Heading Level 2	2
2.1.1 IEEE Style Heading Level 3.....	2
2.1.1.1 IEEE Style Heading Level 4	2
Chapter III. Figures.....	4
Chapter IV. Tables	5
Chapter V. Landscape Pages	6
Chapter VI. Examples of Some Special Cases	8
Appendix A Appendix Title Here	13
Appendix B Appendix Title Here	14
References	15

LIST OF TABLES

Table I	IEEE Style Table Heading	5
---------	--------------------------------	---

LIST OF FIGURES

Fig. 1	IEEE Style Figure Caption.....	4
Fig. 2	Figure Interrupting The Paragraphs	9
Fig. 3	Figure Not Interrupting The Paragraphs	11

KEYS TO SYMBOLS, ABBREVIATIONS, OR NOMENCLATURE

[Optional - If used, the layout is up to the discretion of the student in consultation with the thesis/dissertation chairperson. The symbols, abbreviations, and nomenclature are to be consistent with those specified by the academic discipline and style manual.]

CHAPTER I.

HOW TO USE THIS TEMPLATE

Read the inline comments in the latex project for notes and explanations.

1.1 Required Pages

Preliminary and supplementary pages are labeled in the order they should appear. Optional pages are marked as optional in the comments. List of Tables and List of Figures are required only when 2 or more tables/figures appear in the document.

1.2 Paragraph Styles

In latex/overleaf, use `\chapter` for chapter headings, use `\section` for level 2 headings, use `\subsection` for level 3 headings, use `\subsubsection` for level 4 headings. Read the inline comments for detailed commands. Do not use other commands for headings!

1.3 Table of Contents, List of Tables, and List of Figures

A Table of Contents, List of Tables, and List of Figures are set up already. See `Dissertation.tex` and the inline comments for details!

1.4 How to use references

In latex/overleaf, use `\cite{}` for reference usage and put your bib text in the reference folder. Here is an example [1].

And you can also use `\ref{}` to refer to a chapter/section/subsection/subsubsection or figures/tables with the label. Here is an example: this is Chapter I.

CHAPTER II.

IEEE STYLE HEADINGS

This chapter uses IEEE style headings with numbering. You will use the same heading styles with or without numbering, but this chapter is here to show you what the numbering should look like. Read the inline comments in the latex project for how to switch between this two.

2.1 IEEE Style Heading Level 2

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel diam rutrum, maximus arcu nec, tempus magna. Praesent pretium, mauris eget euismod facilisis, libero lorem laoreet leo, at bibendum arcu massa at dui. Aliquam id felis mi. Vivamus egestas efficitur metus, sed semper libero facilisis in. Cras id scelerisque quam, sit amet dictum tellus.

2.1.1 IEEE Style Heading Level 3: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel diam rutrum, maximus arcu nec, tempus magna. Praesent pretium, mauris eget euismod facilisis, libero lorem laoreet leo, at bibendum arcu massa at dui. Aliquam id felis mi. Vivamus egestas efficitur metus, sed semper libero facilisis in. Cras id scelerisque quam, sit amet dictum tellus.

2.1.1.1 IEEE Style Heading Level 4: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam

eu, scelerisque tortor. Etiam vel diam rutrum, maximus arcu nec, tempus magna. Praesent pretium, mauris eget euismod facilisis, libero lorem laoreet leo, at bibendum arcu massa at dui. Aliquam id felis mi. Vivamus egestas efficitur metus, sed semper libero facilisis in. Cras id scelerisque quam, sit amet dictum tellus.

CHAPTER III.

FIGURES

Fusce venenatis ornare dui nec maximus. Sed egestas elit eget libero dignissim, ut vestibulum nisi sollicitudin. Nam aliquam in turpis sit amet pharetra. Vestibulum eu interdum nunc. Integer ac diam quis erat tincidunt ullamcorper. Curabitur pellentesque ullamcorper leo et pellentesque. Proin vel ante mi.

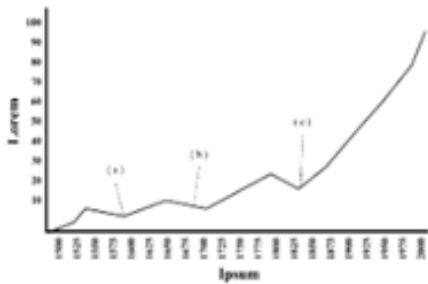


Fig. 1. Tempor nec feugiat nisl pretium fusce id velit. (a) Sed egestas egestas fringilla phasellus. (b) Turpis tincidunt id aliquet risus feugiat in. (c) Dolor morbi non arcu risus quis varius.

Vivamus mi quam, dapibus in magna non, interdum fringilla orci. Maecenas dapibus augue faucibus ligula gravida, eu tincidunt neque placerat. Curabitur mi est, viverra vel aliquet ac, tristique vel nisl. Interdum et malesuada fames ac ante ipsum primis in faucibus. In nibh dui, molestie a egestas at, condimentum non lectus. Curabitur vestibulum venenatis mauris, lobortis mattis libero ullamcorper a. Nullam nec vestibulum mauris, ut placerat urna.

Fig. 1. IEEE Style Figure Caption.

This is an example of how to include a figure in your writing. And you can also refer to this figure as Fig. 1. Read the inline comments.

CHAPTER IV.

TABLES

TABLE I
IEEE STYLE TABLE HEADING

Column 1	Column 2	Column 3
Abcde	123	1234
Fghijk	324	216*
Lmnop	325	0
Qrstuv	9578	33

Below the table, you may include explanatory notes as necessary.

* Notes that apply to a specific part of the table should be marked in the same manner as a footnote.

This is an example of how to include a table in your writing. And you can also refer to this table as Table I. Read the inline comments.

CHAPTER V.

LANDSCAPE PAGES

Some tables and figures may fit better on a landscape-oriented page. When using a landscape page, the page numbers must be rotated so that they will appear in the correct orientation when the document is printed and bound. The following page is an example of a correctly numbered landscape page.

(Landscape Page Example)

This content is in landscape mode, and the page number is rotated as well. Read the inline comments for details of how to enable the landscape mode.

CHAPTER VI.

EXAMPLES OF SOME SPECIAL CASES

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel diam rutrum, maximus arcu nec, tempus magna. Praesent pretium, mauris eget euismod facilisis, libero lorem laoreet leo, at bibendum arcu massa at dui. Aliquam id felis mi. Vivamus egestas efficitur metus, sed semper libero facilisis in. Cras id scelerisque quam, sit amet dictum tellus. Integer porttitor laoreet iaculis. In hac habitasse platea dictumst. Nullam justo ante, lacinia in tristique sed, vehicula in purus. Phasellus condimentum dapibus mauris, id molestie tortor. Nullam vel ante nulla. Etiam aliquam varius sem, sit amet luctus massa rhoncus in. Praesent eget ex nec lacus tincidunt facilisis nec id ligula. Quisque sollicitudin, massa vitae laoreet aliquam, tortor lacus condimentum ligula, vitae sodales velit mauris ut magna. Duis eleifend vulputate ultricies.

This is one of the special cases, we have included the Fig. 2 before this paragraph in the code editor. However, the space in the rest of the page is not enough. In this case, the figure will be arranged the first available place in the next page, even interrupting the paragraph afterwards. To solve this, the best way is to manually change the place where the figure is included in the code editor.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel diam rutrum, maximus arcu nec, tempus magna. Praesent pretium, mauris eget euismod

Fusce venenatis ornare dui nec maximus. Sed egestas elit eget libero dignissim, ut vestibulum nisi sollicitudin. Nam aliquam in turpis sit amet pharetra. Vestibulum eu interdum nunc. Integer ac diam quis erat tincidunt ullamcorper. Curabitur pellentesque ullamcorper leo et pellentesque. Proin vel ante mi.

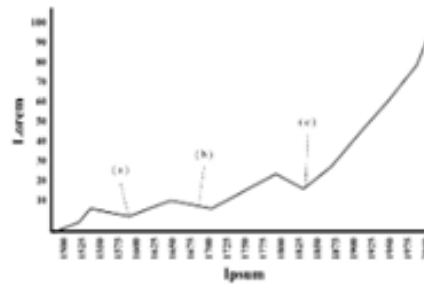


Fig. 1. Tempor nec feugiat nisi pretium fusce id velit. (a) Sed egestas egestas fringilla phasellus. (b) Turpis tincidunt id aliquet risus feugiat in. (c) Dolor morbi non arcu risus quis varius.

Vivamus mi quam, dapibus in magna non, interdum fringilla orci. Maecenas dapibus augue faucibus ligula gravida, eu tincidunt neque placerat. Curabitur mi est, viverra vel aliquet ac, tristique vel nisl. Interdum et malesuada fames ac ante ipsum primis in faucibus. In nibh dui, molestie a egestas at, condimentum non lectus. Curabitur vestibulum venenatis mauris, lobortis mattis libero ullamcorper a. Nullam nec vestibulum mauris, ut placerat urna.

Fig. 2. Figure Interrupting The Paragraphs

facilisis, libero lorem laoreet leo, at bibendum arcu massa at dui. Aliquam id felis mi.

Vivamus egestas efficitur metus, sed semper libero facilisis in. Cras id scelerisque quam,

sit amet dictum tellus. Integer porttitor laoreet iaculis. In hac habitasse platea dictumst.

Nullam justo ante, lacinia in tristique sed, vehicula in purus. Phasellus condimentum

dapibus mauris, id molestie tortor. Nullam vel ante nulla. Etiam aliquam varius sem, sit

amet luctus massa rhoncus in. Praesent eget ex nec lacus tincidunt facilisis nec id ligula.

Quisque sollicitudin, massa vitae laoreet aliquam, tortor lacus condimentum ligula, vitae

sodales velit mauris ut magna. Duis eleifend vulputate ultricies. **Here we break into a**

new page to show the same case and how to handle it.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada
 leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel
 diam rutrum, maximus arcu nec, tempus magna. Praesent pretium, mauris eget euismod
 facilisis, libero lorem laoreet leo, at bibendum arcu massa at dui. Aliquam id felis mi.
 Vivamus egestas efficitur metus, sed semper libero facilisis in. Cras id scelerisque quam,
 sit amet dictum tellus. Integer porttitor laoreet iaculis. In hac habitasse platea dictumst.
 Nullam justo ante, lacinia in tristique sed, vehicula in purus. Phasellus condimentum
 dapibus mauris, id molestie tortor. Nullam vel ante nulla. Etiam aliquam varius sem, sit
 amet luctus massa rhoncus in. Praesent eget ex nec lacus tincidunt facilisis nec id ligula.
 Quisque sollicitudin, massa vitae laoreet aliquam, tortor lacus condimentum ligula, vitae
 sodales velit mauris ut magna. Duis eleifend vulputate ultricies. Nullam vel ante nulla.
 Etiam aliquam varius sem, sit amet luctus massa rhoncus in. Praesent eget ex nec lacus
 tincidunt facilisis nec id ligula. Quisque sollicitudin, massa vitae laoreet aliquam, tortor
 lacus condimentum ligula, vitae sodales velit mauris ut magna. Duis eleifend vulputate
 ultricies.

**This is the example of how to handle this manually. This is the place where
 Fig. 3 is first time referred to. The space in the rest of the page is not enough. We
 have changed the place where the figure is included. Please check the code editor to
 see the changes.**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada
 leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel
 diam rutrum, maximus arcu nec, tempus magna. Praesent pretium, mauris eget euismod

facilisis, libero lorem laoreet leo, at bibendum arcu massa at dui. Aliquam id felis mi. Vivamus egestas efficitur metus, sed semper libero facilisis in. Cras id scelerisque quam, sit amet dictum tellus. Integer porttitor laoreet iaculis. In hac habitasse platea dictumst. Nullam justo ante, lacinia in tristique sed, vehicula in purus. Phasellus condimentum dapibus mauris, id molestie tortor. Nullam vel ante nulla. Etiam aliquam varius sem, sit amet luctus massa rhoncus in. Praesent eget ex nec lacus tincidunt facilisis nec id ligula.

We includ the Fig. 3 after this paragraph in the code editor. In this way, there is enough space for the figure between the paragraphs. Including tables should also be in the same way.

Fusce venenatis ornare dui nec maximus. Sed egestas elit eget libero dignissim, ut vestibulum nisi sollicitudin. Nam aliquam in turpis sit amet pharetra. Vestibulum eu interdum nunc. Integer ac diam quis erat tincidunt ullamcorper. Curabitur pellentesque ullamcorper leo et pellentesque. Proin vel ante mi.

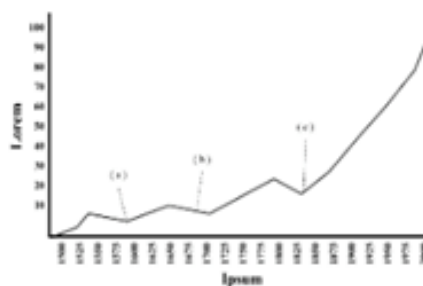


Fig. 1. Tempor nec feugiat nisl pretium fusce id velit. (a) Sed egestas egestas fringilla phasellus. (b) Turpis tincidunt id aliquet risus feugiat in. (c) Dolor morbi non arcu risus quis varius.

Vivamus mi quam, dapibus in magna non, interdum fringilla orci. Maecenas dapibus augue faucibus ligula gravida, eu tincidunt neque placerat. Curabitur mi est, viverra vel aliquet ac, tristique vel nisl. Interdum et malesuada fames ac ante ipsum primis in faucibus. In nibh dui, molestie a egestas at, condimentum non lectus. Curabitur vestibulum venenatis mauris, lobortis mattis libero ullamcorper a. Nullam nec vestibulum mauris, ut placerat urna.

Fig. 3. Figure Not Interrupting The Paragraphs

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel Quisque sollicitudin, massa vitae laoreet aliquam, tortor lacus condimentum ligula, vitae sodales velit mauris vitae sodales vut mauris magna. **Another special case is, when writing some formula or some explanations, you may write in this way: Lorem ipsum dolor sit amet, consectetur adipiscing adipis elit. here we denote the second as s .**

You will find that the character s is isolated at the beginning of a new line. This should be avoid. The way to solve this is also included in the very beginning of Dissertation.tex. You can find the solution using $\sim$ in the code editor in the next paragraph.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ac malesuada leo. Aliquam sit amet eros eleifend, molestie quam eu, scelerisque tortor. Etiam vel Quisque sollicitudin, massa vitae laoreet aliquam, tortor lacus condimentum ligula, vitae sodales velit mauris vitae sodales vut mauris magna. **Another special case is, when writing some formula or some explanations, you may write in this way: Lorem ipsum dolor sit amet, consectetur adipiscing adipis elit. here we denote the second as s .**

In this way writing as “ $as \sim s$ ” in the code editor, “ $as s$ ” will be considered to be rendered together to avoid the isolated character in a new line. It is also recommended always connect your references or refers with a $\sim$. Read the code editor for details, e.g. Lorem ipsum [1], Lorem ipsum Fig. 3.

APPENDIX A

APPENDIX TITLE HERE

[Appendices follow the last page of the text. Each appendix should be labeled, either at the top or on a proceeding blank page, as Appendix A, Appendix B, etc. The sequence of the appendices follows the order in which they were first introduced in the main body of the text. Each appendix needs to be labeled and named in the main body of the text for it to be included in the appendix section.]

APPENDIX B

APPENDIX TITLE HERE

[Appendices follow the last page of the text. Each appendix should be labeled, either at the top or on a proceeding blank page, as Appendix A, Appendix B, etc. The sequence of the appendices follows the order in which they were first introduced in the main body of the text. Each appendix needs to be labeled and named in the main body of the text for it to be included in the appendix section.]

REFERENCES

- [1] W. Y. (Editor and Co-Authors), *Edge Intelligence in Cyber-Physical Systems: Foundations and Applications*. Academic Pressr, June 1, 2025.

