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Master's thesis

Thesis Title

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The approval of the dissertation by the Department of Electrical Engineering, Computer Engineering, and Informatics does not necessarily imply the approval by the Department of the views of the writer.

Acknowledgements

I would like to thank [...], for [...]

ABSTRACT

An abstract must be fully self-contained and make sense by itself, without further reference to outside sources or to the actual paper. It highlights key content areas, the research purpose, the relevance or importance of your work, and the main outcomes. Write up to 150-200 words.

Keywords: Give 4-5 keywords that describe the topic of your document

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LIST OF ABBREVIATIONS

VAR	Virtual Augmented Reality
ADHD	Attention Deficit-Hyperactivity Disorder
BMI	Body Mass Index

1 Introduction

The introduction is the first section of the document and covers the 30% of the whole dissertation. It draws your reader in, setting the stage for your research with a clear focus, purpose, and direction on a relevant topic. It may include a review of the background theory in your subject area in the form of a literature review. The literature review may be in a separate section. [1]. [2–8]

The introduction should include:

- Dissertation topic, in context: give necessary background information
- Your focus and scope: focus and define the scope of your research
- The relevance of your research: define how your research relates to existing work on your topic. Explain how it solves a practical or theoretical problem, addresses a gap in the literature, builds on existing research and proposes a new understanding of the topic.
- Your questions and objectives: explain what your research aims to find out, and how.
- An overview of your structure: end the introduction with an outline of the structure of your dissertation to follow. Share a brief summary of each chapter and show clearly how each contributes to your central aims.

1.1 Aims and Objectives

1.2 Research Questions

1.3 Contribution

1.4 Structure of the Thesis

1.5 Summary

2 Literature Review

The literature review chapter provides a comprehensive understanding of the academic and research background of your topic. This section should situate your research within the existing body of knowledge, identify gaps, and demonstrate how your work contributes to the field. The following instructions will guide you through the process of writing your literature review.

Introduction to the Literature Review

- **Purpose:** Begin by explaining the role of the literature review within the thesis. Clarify that this section is meant to situate your research within the existing body of knowledge, identify gaps, and demonstrate how your work contributes to the field.
- **Scope:** Define the scope of your review (e.g., historical context, key theories, recent advancements) and set expectations on how far back you plan to explore the literature.

Search and Selection of Literature

- **Research Sources:** Gather sources from reputable academic journals, books, conference papers, and other scholarly work. Use databases like IEEE Xplore, Google Scholar, and others specific to your field.
- **Criteria for Selection:** Focus on recent publications (within 5-10 years) as well as seminal works that laid the foundation for the topic.
- **Keywords and Search Terms:** Generate relevant keywords and search terms related to your topic to refine your search for high-quality sources.

Structuring the Review

- **Thematic Approach:** Organize your literature review thematically. For example, group the literature by topics, trends, methods, or key debates.
- **Chronological Approach:** Alternatively, use a chronological approach if tracing the evolution of a theory or technology over time is more appropriate.
- **Comparative Analysis:** Compare and contrast the findings of different studies. Identify trends, inconsistencies, or contradictions in the literature.

Critical Evaluation

- **Analysis Over Summary:** Avoid simply summarizing the literature. Instead, critically evaluate each piece of work by discussing its strengths, weaknesses, and relevance to your research question.
- **Highlight Gaps:** Identify gaps in the current literature where further research is needed to justify the originality and necessity of your own study.

Theoretical Framework

- **Key Theories and Models:** Outline key theories, models, or frameworks relevant to your research. Explain how these theories have been used or evolved in previous studies.
- **Application to Your Work:** Explain how the theoretical framework discussed relates directly to your own research question.

Connection to Research Problem

- **Linking Back:** Continuously link your literature review back to your research problem or question. Each section should demonstrate how the reviewed literature informs or supports your study.

Citing Sources

- **Proper Referencing:** Correctly cite all sources included in the literature review, using the citation style required (IEEE).
- **Sufficient Detail:** Cite a wide array of relevant research, but avoid over-citing irrelevant or tangential sources.

Conclusion of the Literature Review

- **Summary of Findings:** Briefly summarize the key findings from the literature you reviewed.
- **Identifying the Research Gap:** Conclude the chapter by clearly stating the gap in the literature that your thesis will address.
- **Transition:** Make a smooth transition to the next chapter of your thesis, showing how your research question arises from the literature review.

Additional Tips

- **Consistency:** Maintain a consistent and clear narrative throughout the literature review.
- **Balanced Coverage:** Aim for a balanced discussion, covering both supporting and opposing viewpoints.
- **Depth Over Breadth:** Emphasize depth of analysis over a superficial listing of references.

3 Research Methodology

This section describes the materials and methods used for the research. It is essential to describe the steps clearly and accurately to enable readers to determine how much your methodology may have affected your results and to replicate your study if necessary. This allows them to evaluate your research's reliability and validity and dissertation topic.

A methods section may include an overview of the research design, details of the sample and the sampling technique used, and a description of procedures, materials, and statistical tools.

3.1 Section

3.2 Section

3.3 Summary

4 Experimental Results and Discussion

4.1 Experimental Results

The results section presents the main findings of your research. Report all relevant results concisely and objectively, in a logical order. That gives your reader a clear idea of exactly what you found and keeps the data itself separate from your subjective analysis. Any evaluation of the findings should be discussed in the next section.

This section may contain visual elements accompanied by text. In quantitative research, it's often helpful to include graphs, charts, tables, etc., but only if they are directly relevant to your results. Give these elements clear, descriptive titles and labels so that your reader can easily understand what is being shown (use numbering and caption title as recommended).

Tables must be as simple as possible. Use numbers and title headings for each one. See the example below:

Table 4.1: Enrollment in local colleges, 2005

College	New students	Graduating students	Change
<i>Undergraduate</i>			
Cedar University	110	103	+7
Elm College	223	214	+9
Maple Academy	197	120	+77
<i>Graduate</i>			
Cedar University	24	20	+4
Elm College	43	53	-10
Maple Academy	3	11	-8
Total	600	521	79

Use the word "Figure" for images, diagrams and charts. Use numbers and title headings for each one. See the example below:

4.2 Discussion/ Interpretation

In this section, you discuss your results, while writing a clear statement as to whether or not the results support the original hypotheses or research question. Compare your findings with those of other research dealing with the same or similar topic. Then, give the differences and similarities between them and specify what new evidence or knowledge emerges from this research.

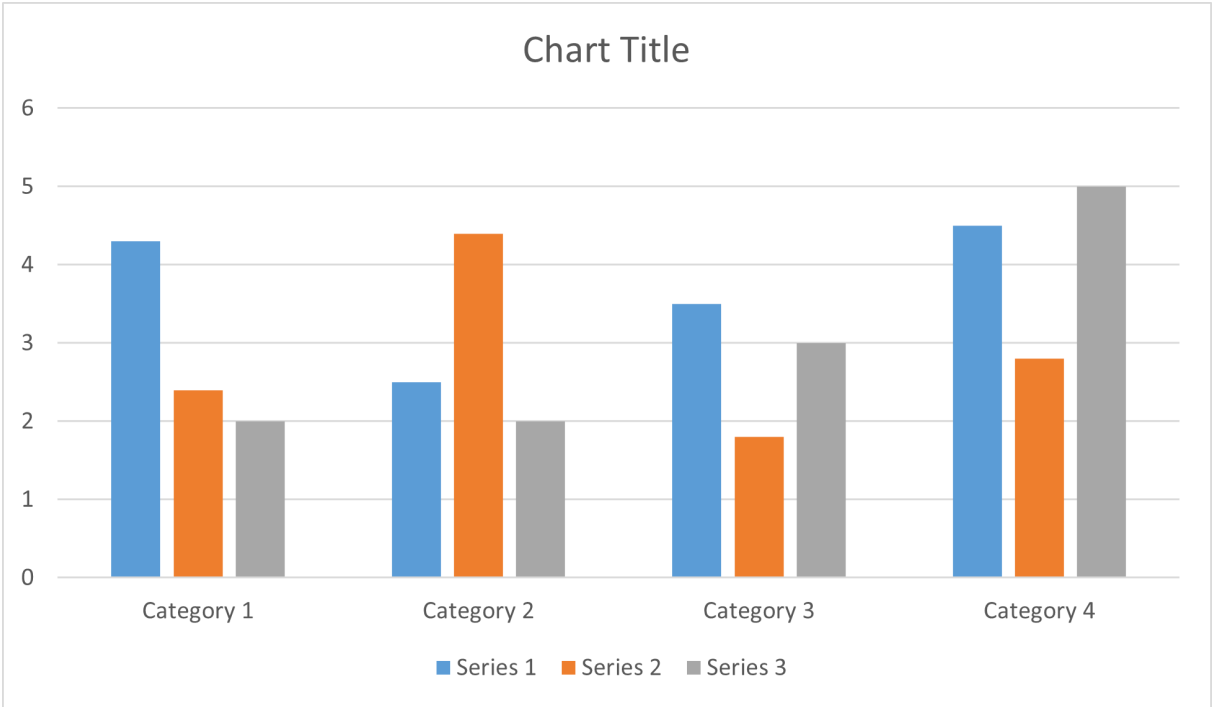


Figure 4.1: Enrollment in local colleges, 2005

5 Conclusion and Recommendations

In this section, you remind the purpose of the study, provide a summary of the results and report the conclusions derived from the study.

Here, you should mention the limitations of the study, related to the formulation of research aim and objectives, application of data collection method, sample size, the scope of discussions and analysis, etc. You can propose future research suggestions that address the limitation of the study and the generalizability of the results.

Finally, include suggestions for further research. Additionally, you can propose future studies that can address the same research problem in a different setting, context, location and/or culture.

5.1 Section

5.2 Summary

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APPENDICES

APPENDIX I

Title of Appendix

If you have material that cannot be included within your document, you must include an appendix. You may include one appendix or a number of appendices. If you have more than one appendix, you would number each accordingly (i.e., Appendix I, Appendix II, etc.). Write your appendix headings in the same manner as your chapter headings.