

<BSC PROJECT TITLE> <SECOND LINE FOR LONG TITLES>

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BACHELOR'S THESIS

ΙN

< COMPUTER ENGINEERING OR ELECTRICAL ENGINEERING>

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Preface

Abstract

Acknowledgements

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Chapter 1 Introduction

Literature Review

- 2.1 Overview of Large Language Models
- 2.2 Linear Algebra in Machine Learning
- 2.3 Previous Studies on LLM Compression and Optimization

Theoretical Foundations

- 3.1 Linear Algebra in Deep Learning
- 3.2 Understanding LLMs

Methodology

- 4.1 Educational Synergy Development
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- 4.3 Evaluation Method
- 4.3.1 Compression of LLM (Flan-T5-Base) Using Low Rank Decomposition
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Implementation

- 5.1 Curriculum Component Implementation
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Evaluation and Results

- 6.1 Curriculum Effectiveness
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- 6.3 Compression and Optimization of LLM
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Discussion

- 7.1 Interpretation of Results
- 7.2 Theoretical and Practical Implications
- 7.3 Limitations and Challenges

Conclusion and Future Work

- 8.1 Summary of Key Findings
- 8.2 Contributions to the Field
- 8.3 Recommendations for Future Research