## DEVELOPING A TRANSFORMER-BASED APPROACH FOR FUSING INFRARED AND VISIBLE IMAGES FOR IMPROVED OBJECT DETECTION

# A THESIS SUBMITTED TO THE GRADUATE SCHOOL OF INFORMATICS OF THE MIDDLE EAST TECHNICAL UNIVERSITY BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN THE DEPARTMENT OF INFORMATION SYSTEMS

# Developing A Transformer-Based Approach for Fusing Infrared and Visible Images for Improved Object Detection

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.				
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#### **ABSTRACT**

# DEVELOPING A TRANSFORMER-BASED APPROACH FOR FUSING INFRARED AND VISIBLE IMAGES FOR IMPROVED OBJECT DETECTION

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## LIST OF ABBREVIATIONS

ESM Experience Sampling Method

GLMM Generalized Linear Mixed Model

#### INTRODUCTION

Lorem ipsum dolor sit amet, mea sanctus appetere id, ut blandit referrentur mel. Qui legendos mediocrem ei, mazim soluta praesent sed ut. Eam diam putent invidunt id. Cu his virtute interpretaris, quod latine at per. Has ex aliquip expetendis, per at duis suscipiantur, vix id laudem nostro omnesque. Te pro nusquam detracto, ius at fuisset disputando, cibo malorum dignissim ut pri.

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Per et blandit patrioque, ubique incorrupte sit an, pro porro laoreet et. Mel blandit officiis disputando ea, eu pri sonet debitis appellantur. Cu numquam nominati temporibus mei, convenire efficiantur et nec. Mea et quando labores laoreet, ad sed utinam labitur perfecto. Mei appetere detraxit vituperata ea, quo discere epicurei ad, est novum doctus inciderint ad. His ne mucius labores, in vis quod ullum. Vidisse fabulas senserit sea id, ad usu mentitum consulatu, ocurreret deterruisset vel ne.

At euismod eruditi theophrastus est, sit te doctus molestiae. Ne natum elitr ullamcorper est. Cu malorum recusabo mei, ei mea laoreet reprimique. Persius discere nusquam mel ei, at inimicus posidonium sed. Vel ad unum illud [?].

- 1.1 Research Questions
- 1.2 Contributions of the Study
- 1.3 Organization of the Thesis

#### **RELATED WORK**

In this chapter, related studies are given in detail.

#### 2.1 Related Work Section I



#### **USER EXPERIMENT**

In this chapter, the details of the user experiment are presented.

3.1 Research Method and Experiment Design

#### **USER EXPERIMENT**

In this chapter, the details of the user experiment are presented.

4.1 Research Method and Experiment Design

## CONCLUSION AND FUTURE WORK

## **REFERENCES**

[1] J. Cohen, "A power primer," Psychological Bulletin, vol. 112, no. 1, p. 155, 1992.

## APPENDIX A

#### TABLES FOR RELATED WORK CHAPTER

A.1 Summary of the Studies

## APPENDIX B

#### **EXTRA MATERIAL**

## APPENDIX C

## INSTRUMENTS AND ETHICAL CLEARANCE