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

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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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ÖZ

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Türkçe öz buraya

Anahtar Kelimeler: Bir anahtar kelime, başka bir anahtar kelime, başka anahtar kelimeler

To the memories of my beloved friends Murat Tekin and Ragip Enes Katran

ACKNOWLEDGMENTS

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LIST OF ABBREVIATIONS

IF   Image Fusion

VIF   Visual and Infrared Image Fusion

AI   Artificial Intelligence

CNN   Convolutional Neural Networks

GAN   General Adveserial Networks

CHAPTER 1

INTRODUCTION

Image Fusion is a computer vision task that has been taken place for many years. Gathering all the complementary usefull informations into single image is called image fusion, *a.k.a* IF. Visual and Infrared Image Fusion, *henceforth will be referred to as VIF*, is a subfield of iamge fusion. Since the first study [**?**] in 1989, VIF is actively studied. In the era of AI, new methods such as CNN, GAN, auto-encoder, transformers are also applied to the VIF problem.

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1.2 Contributions of the Study

1.3 Organization of the Thesis

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RELATED WORK

In this chapter, related studies are given in detail.

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CHAPTER 3

USER EXPERIMENT

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

3.1   Research Method and Experiment Design

CHAPTER 4

USER EXPERIMENT

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

4.1 Research Method and Experiment Design

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