

WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF ELECTRONICS

FIELD: Computer Science
SPECIALIZATION: Internet Engineering (INE)

MASTER OF SCIENCE THESIS

Deepfake analiza

Deepfake analysis

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GRADE:

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Chapter 1

Introduction

1.1 Abstract

About problem: what is deepfake, why it's impactful in these days, possible use-cases.

1.2 Objective and assumptions

What I am going to analyze in this paper and what are my assumptions. What is my desired outcome of my research.

1.3 Theoretical background

1.3.1 Artificial neural network

General idea of ANN and CNN: how it works, basic features, training process...

1.3.2 Deepfake

Definition, approaches (VAE, GAN, cycleGAN)

Chapter 2

Implementation

2.1 Technologies

2.1.1 Software and Libraries

As in title...

2.1.2 Hardware

As in title ... (My hardware, google colab, google cloud?)

2.2 Datasets

How dataset for deepfake learning should look like Used Datasets: VoxCeleb (description), how I prepared my own datasets.

2.3 Network learning

Detailed description of each method. What is main idea, what are the topologies, strengths and weaknesses...

2.3.1 VAE

2.3.2 GAN

2.3.3 CycleGAN

Chapter 3

ANN models

Chapter 4

Results

Chapter 5

Conclusion

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