

Roosa Kuusivaara & Väinö-Waltteri Granat

Image Recognition - Report

Abstract

Roosa Kuusivaara & Väinö-Waltteri Granat: Image Recognition - Report
Laboratory Report
Tampere University
Master's Degree Programme in Signal Processing
October 2023

This report documents the work done in the Image Recognition assignment as a part of the Advanced Signal Processing Laboratory course. In the assignment we familiarize ourselves with modern machine learning, in particular deep learning, and apply them to the task of building a smile detector for real-time execution. The goal is to achieve an accuracy of at least 85% in classifying images based on facial expressions, smiles or non-smiles, using GENKI-4k dataset for training the network.

Keywords: Laboratory Report, Machine Learning, Deep Learning, Image Recognition

Contents

1	Introduction	1
2	Methodology	2
3	Results	3
4	Conclusions	4

1 Introduction

This is an introduction

2 Methodology

3 Results

4 Conclusions