SFU SIMON FRASER UNIVERSITY

SCHOOL OF ENGINEERING SCIENCE

MULTIMEDIA LABORATORY

MEng Project Report

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Abstract

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List of Abbreviations

DFTS Deep Feature Transmission Simulator. 3

HaLRTC High accuracy Low Rank Tensor Completion. 3

SiLRTC Simple Low Rank Tensor Completion. 3

Chapter 1

Introduction

1.1 Motivation

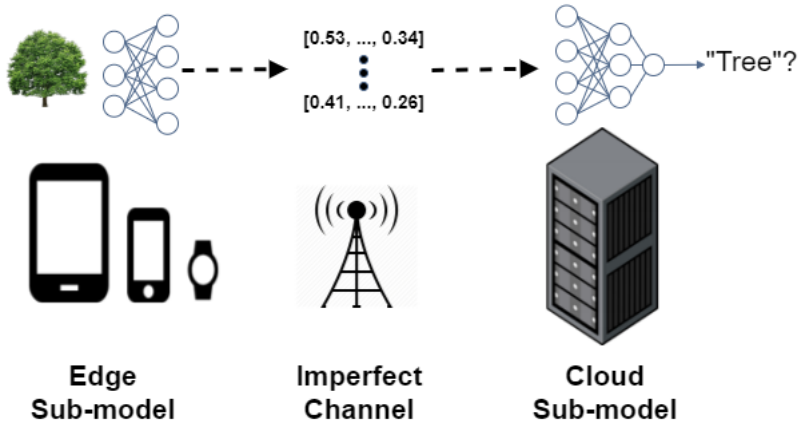

Figure 1-1: Blueprint for Collaborative Intelligence.[1]

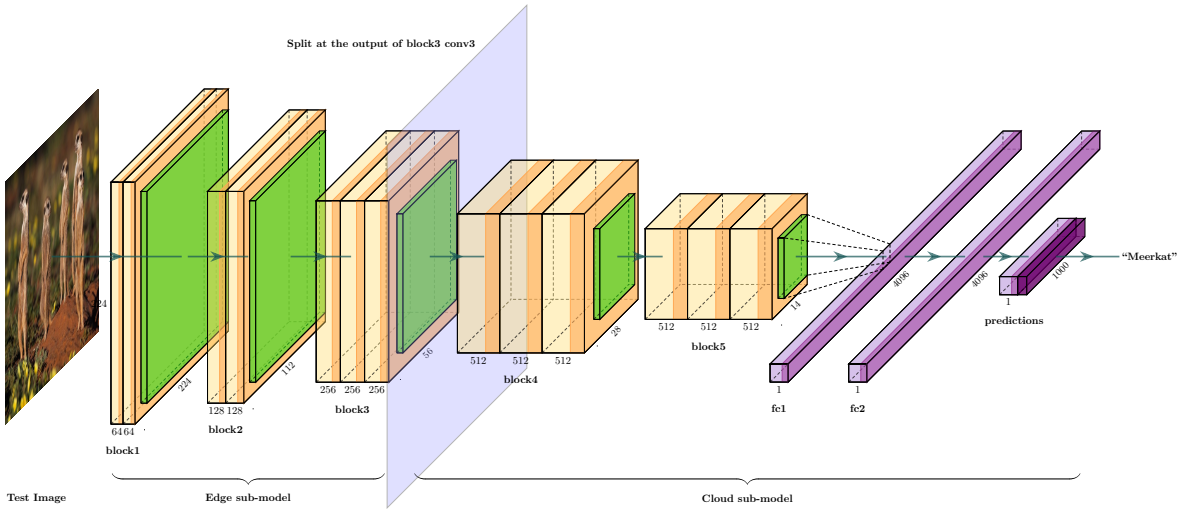

Figure 1-2: Splitting a deep model into two sub-models: the mobile or device sub-model and the remote or cloud sub-model.

1.2 Project overview

Chapter 2

Background and Literature Survey

2.1 Collaborative Intelligence

The pioneer papers are [2] and [1].

2.2 Deep Feature Transmission Simulator

DFTS short write up [3].

2.3 Tensor completion methods

Tensor completion methods for collaborative intelligence [4]. Original paper for SiLRTC and HaLRTC [5].

say that the algorithms are in appendix

2.4 Summary

Chapter 3

Methods

3.1 Introduction

3.2 Summary

Chapter 4

Experiments and Results

4.1 Introduction

4.2 Summary

Bibliography

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[4] L. Bragilevsky and I. V.Bajić, "Tensor completion methods for collaborative intelligence," *IEEE Access*, vol. 8, pp. 41162–41174, 2020. [3]

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