Embedded machine learning (TinyML)

s213059

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1 Project course title

English: Embedded machine learning (TinyML)
Danish: Indlejret maskinlæring (TinyML)

2 Project course description

The purpose of the special project course is to provide an understanding of embedded machine learning, the models, training and deployment including the embedded devices. The course aims to result in a part of a scientific paper.

3 Learning objectives

- Learn the basics of neural network pruning an sparsity

- Learn the basics of quantization

- Understand and explain the method and results of Neural Architecture Search

- Deployment of model from desktop to embedded device

- Understand and perform model porting from TensorFlow to TensorFlow Lite

- Structure and write a section of a scientific paper

4 Grading

The output of the project should result in a section of a paper which will be graded on the 7 step DTU grade scale.

5 Points

7.5 ECTS