Tensorflow

Seminar: Efficient Programming of HPC Systems
Frameworks and Algorithms

Efe Kamasoglu

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Abstract

1 Introduction

TensorFlow is a free and open-source framework developed by Google Brain, which finds its application widely in the field of machine learning and artificial intelligence. It is used to build and train large-scale models according to the client's preferences and provided data sets. In order to train a model, TensorFlow carries out several computations by mapping them onto a variety of hardware, such as mobile devices or HPC systems consisting of multiple computational units with hundreds of GPUs.