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EuroCC tutorial on transfer learning in computer vision - part 2

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Transfer learning is a machine learning (ML) technique of reusing models with pre-trained knowledge obtained for a general ML task, and applying it to another, more specific ML task, with limited training data or computational resources. This hands-on training will cover the following topics in computer-vision-related problems:

- Introduction to transfer learning in computer vision;
- Image classification with feature extraction - using a downloadable model with pre-trained parameters for a custom classification task;
- Image classification with fine-tuning - update parameters of a pre-trained model to get better results;
- Demonstration of handling imbalanced data set for transfer learning in image classification

Prerequisites

For this hands-on you will need a google account to access Google Colab service. Due to the time constraints only the simplest networks will be trained during the tutorial, larger models will be left to experiment with for the participants as a home assignemnt.

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