**Why is this an important area of study? [0.5 points]**

Efficient training techniques can significantly reduce training time and therefore reduce the cost of training. We can either reduce the dataset size or increase the convergence speed.

**Describe two different techniques/approaches discussed [0.5 points]**

1. Data optimization: by either selecting a subset of informative training examples or generating a synthetic representative dataset, we can use fewer training samples to get a similar performance.
2. Curriculum learning: by giving the model increasingly difficult examples, we can increase the convergence speed and reduce the overall training time.

**Discuss relative strengths [0.5 points] and weaknesses [0.5 points] of the two techniques described above. [1 point total]**

Both methods reduce the training time. But data optimization techniques rely on a good strategy to select or generate informative examples. On the contrary, curriculum learning requires a quantification of learning difficulty and a good strategy for designing the “curriculum”.