

hw11 Report

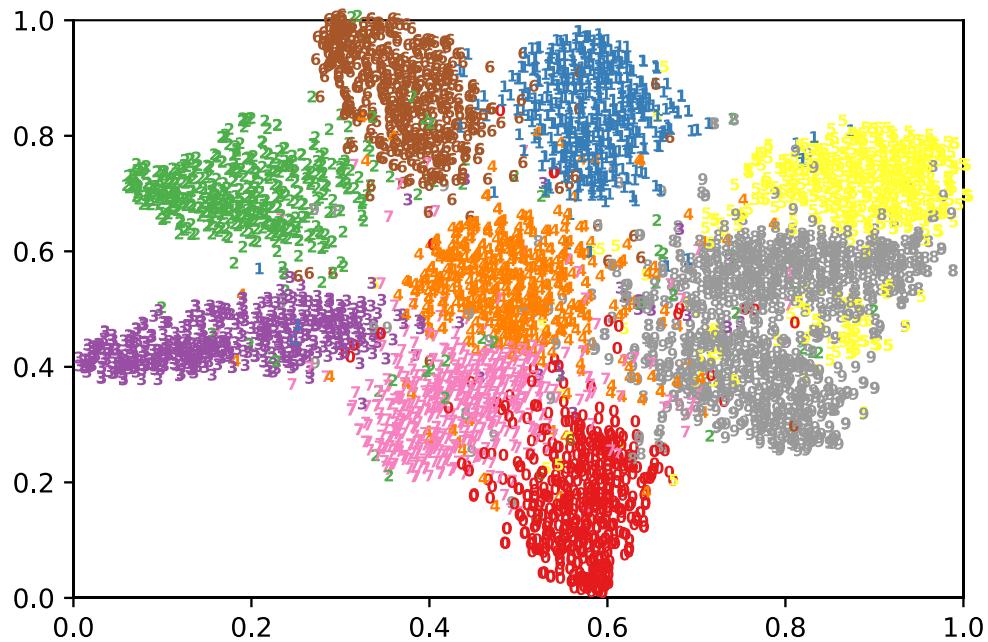
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陳欣頤

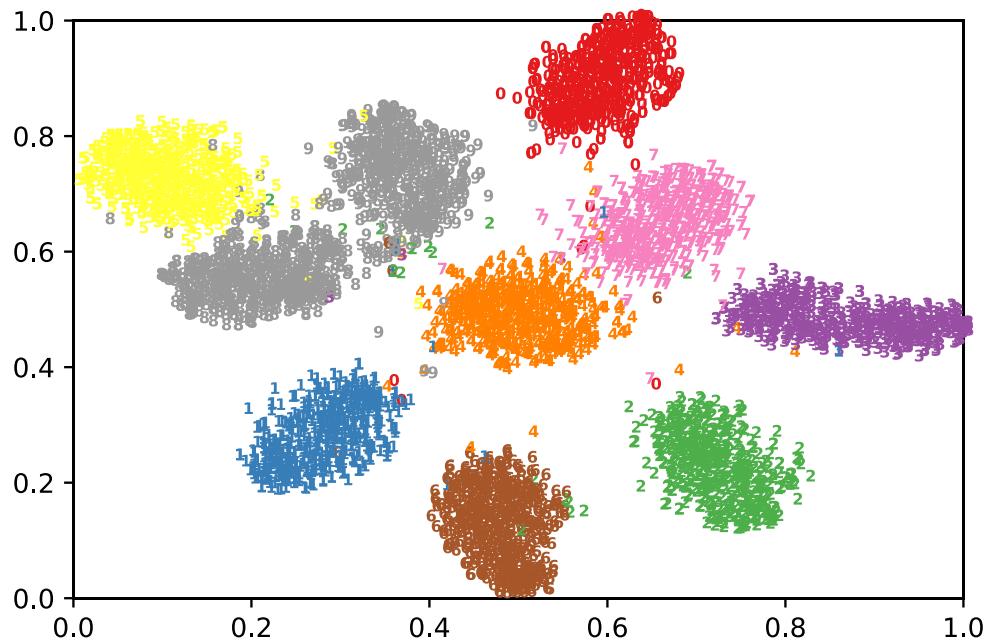
Question1: Visualize distribution of features **across different classes**.

1. Please make t-SNE plot the distribution of early, middle, final stage.

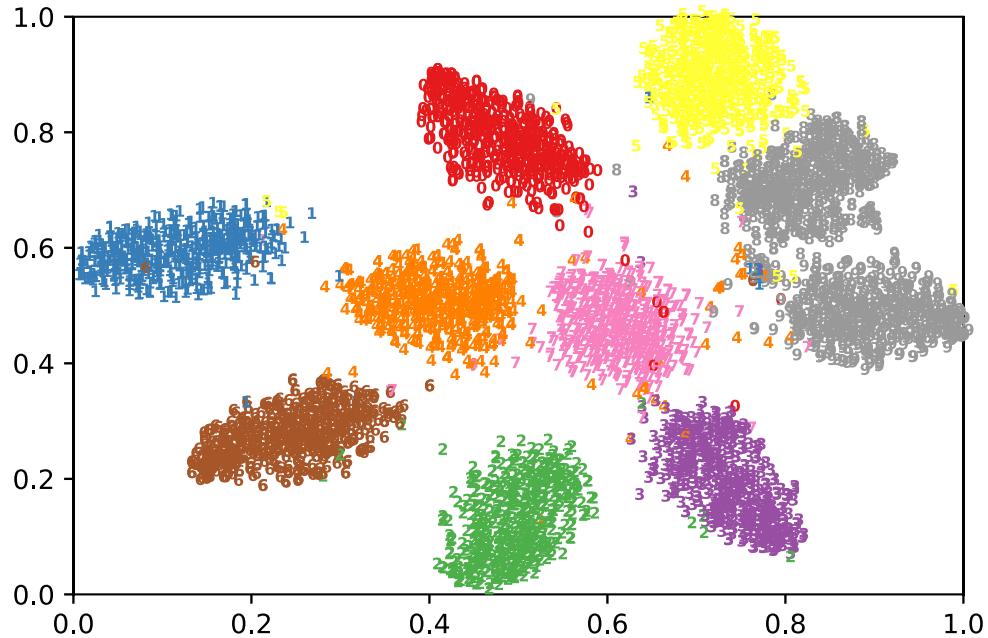
i. early stage → 100 epoch



ii. middle stage → 500 epoch



iii. final stage → 1000 epoch



2. Explain and analyze the distribution of features of three stages.

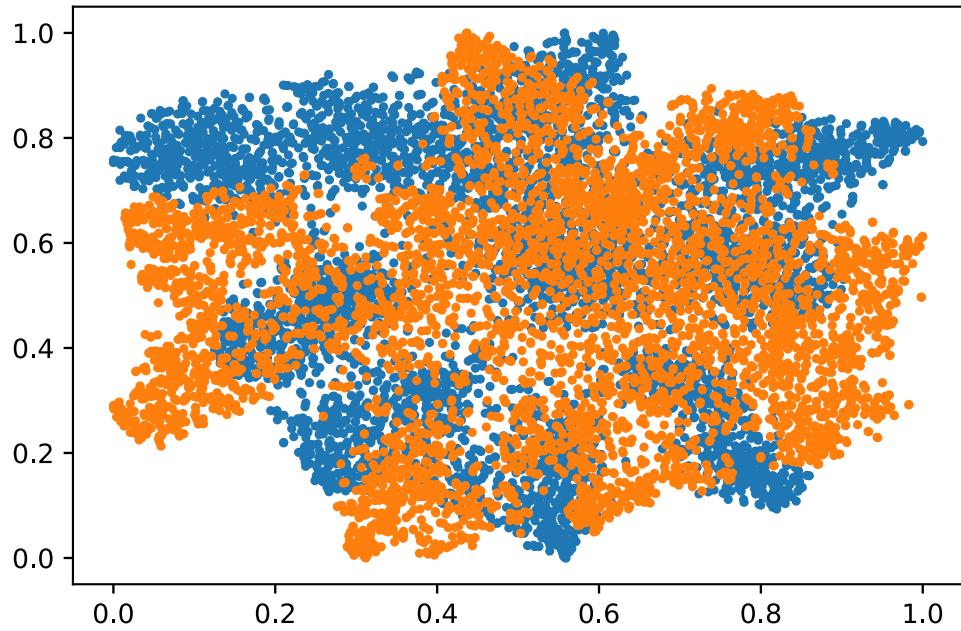
a. Hint: Is this a good feature extractor for classification task? Why or Why not?

總共訓練了 1000 個 epoch，在 early stage (100 epoch) 時還無法把特徵的界線明顯的區分，還有一些特徵混雜在一起，因此此階段的 feature extractor 還不夠完備。到了 middle stage (500 epoch) 和 final stage (1000 epoch) 時，已能大致將特徵區出來，僅有少數特徵無法辨識正確，因此這個階段的 feature extractor 可以做較好分類。

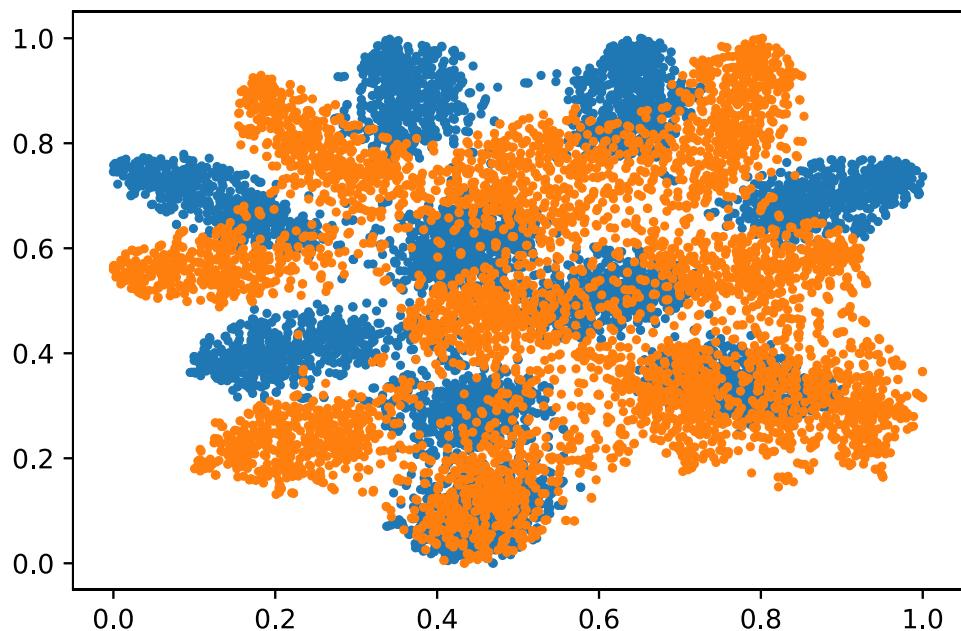
Question2: Visualize distribution of features **across different domains**.

1. Please plot the distribution of early, middle, final stage.

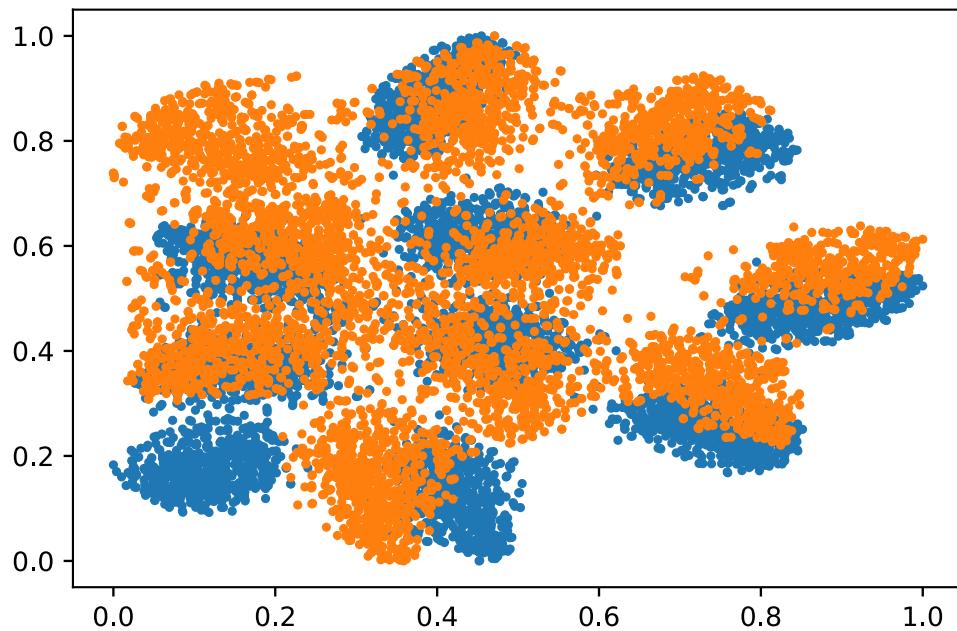
i. early stage → 100 epoch



ii. middle stage → 500 epoch



iii. final stage → 1000 epoch



2. Explain and analyze the distribution of features of three training phases.

a. Hint: Is this a good feature extractor for domain adaption task? Why or Why not?

在 early stage (100 epoch) 時，特徵分類的問題還無法將界線明顯的區分，但 domain adaption task 已經將某些兩種不同 domain 的圖片 match 在同個領域上。到了 middle stage (500 epoch) 和 final stage (1000 epoch) 時，這些 domain 的特徵也隨不同的 label 被劃分，但 middle stage 的 feature extractor 還沒有很好的表現，而到了 final stage 這個階段的 feature extractor 更確實的將不同 domain 的圖片匹配。