

# TPA 9: Semi-supervised clustering for organizing large image/video datasets

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**Problem Statement:** Organize a large image/video dataset into groups : (i) based on the type of object for images, (ii) based on events for videos, given a small training dataset. Use and compare different semi-supervised clustering (or equivalent) methods for this purpose.

**Input:**

- A small training dataset of images/videos (2 or 3 samples per class)

**Expected Output:**

- Groups of image/videos based on the training set.

**Dataset:**

- Image: PASCAL VOC 2007, Caltech-101, Imagenet, etc.
- Video: Hollywood, Hollywood2, TRECVID, etc

**References**

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- Yin, Xuesong, et al. "Semi-supervised clustering with metric learning: An adaptive kernel method." Pattern Recognition 43.4 (2010): 1320-1333.
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