

UCSD Pedestrian Database

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This is the UCSD pedestrian database used in “Modeling, Clustering, and Segmenting Video with Mixtures of Dynamic Textures” [1].

1 Database Format

The database contains video of pedestrians on UCSD walkways, taken from a stationary camera. All videos are 8-bit grayscale, with dimensions 238×158 at 10 fps. The database is split into scenes, taken from different viewpoints (currently, only one scene is available...more are coming). Each scene is in its own directory `vidX` where `X` is a letter (e.g. `vidf`), and is split into video clips of length 200 named `vidfXY_33_ZZZ.y`, where `Y` and `ZZZ` are numbers. Finally, each video clip is saved as a set of `.png` files. Examples from each scene are presented in Figure 1. If you use this database, please reference [1].



`vidf`

Figure 1: Example viewpoints from the database

2 Experiments

The `vidf` scene was used in the segmentation experiment of [1]. In particular, `vidf1_33_000.y` and `vidf1_33_007.y` are the “sparse traffic” and “heavy traffic” pedestrian scenes in Figures 11a and 11c of [1]. In addition, `vidf1_33_007.y` was used to train the model for segmenting the remaining `vidf` video. These results are available online [2].

3 History

- 2008/05/22 - initial version (`vidf` only)

References

- [1] A. B. Chan and N. Vasconcelos, "Modeling, Clustering, and Segmenting Video with Mixtures of Dynamic Textures," *IEEE Trans. on Pattern Analysis and Machine Intelligence*, vol. 30(5), pp. 909-926, May 2008.
- [2] <http://www.svcl.ucsd.edu/projects/motiondytex>