

Supplemental for “Privacy Preserving Crowd Monitoring: Counting People without People Models or Tracking”

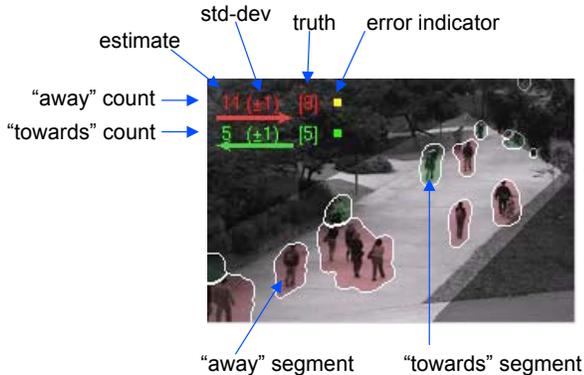
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This is the supplemental material for the paper “Privacy Preserving Crowd Monitoring: Counting People without People Models or Tracking” in CVPR 2008 [1]. We have included the videos of the results shown in Figures 9 and 11. The videos are encoded in Quicktime (h.264) and are playable with the latest Quicktime player (available from <http://www.quicktime.com>). The videos are:

1. `pedcount1.mov` – crowd size estimates for the pedestrian dataset (2000 frames), with 1200 frames for testing and 800 frames for training. An example video frame is shown below:



The error indicator summarizes the performance of the system with respect to the ground-truth. The different colors indicate the following: (green dot) the estimate is within one standard-deviation of the ground-truth; (yellow dot) the estimate is within two standard-deviations; (red dot) the estimate is outside 2 standard-deviations. Finally, the frames marked as “training set” were used to train the GP regression model, and the region-of-interest is also highlighted. The video is sped up to twice the normal frame rate.

2. `pedcount2.mov` – crowd size estimates on 6 minutes of video following `pedcount1.mov`. The GP model is trained on the 2000 frames of the pedestrian

dataset. The video is sped up to twice the normal frame rate. Unfortunately, the full hour of video could not be included due to space constraints. Please see [2] for more results.

References

- [1] A. B. Chan, Z. S. J. Liang, and N. Vasconcelos, “Privacy preserving crowd monitoring: Counting people without people models or tracking,” in *IEEE Conference on Computer Vision and Pattern Recognition*, 2008.
- [2] “Privacy preserving crowd monitoring: Counting people without people models or tracking.” [Online]. Available: <http://www.svcl.ucsd.edu/projects/peoplecnt>