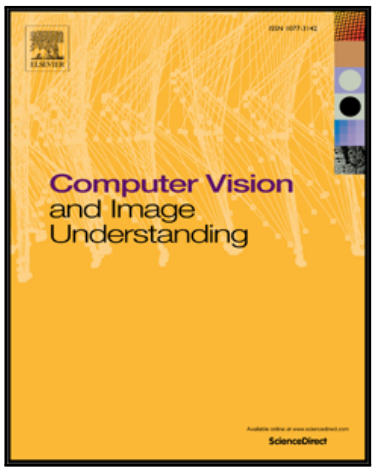

Stand-alone quality estimation of background subtraction algorithms

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Highlights

- We survey and explore existing stand-alone measures proposed in the literature to estimate the quality of background subtraction algorithms without ground-truth.
- We propose a new taxonomy for stand-alone evaluation measures and analyze 21 measures to determine good object properties.
- We demonstrate the utility of the 21 measures to evaluate the segmentation masks of eight background subtraction algorithms in a large heterogeneous dataset with varied challenges (CDNET2014).
- Our experiments demonstrate that qualitative performance levels can be distinguished and background subtraction algorithms can be ranked without the need of ground-truth.