**EVALUATION OF MULTIPLE CUE HEAD POSE ESTIMATION ALGORITHMS IN NATURAL ENVIRONMENTS (WedAmOR5)**

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**Abstract:**
Head pose estimation is a research area which has many applications, e.g. in human computer interfaces design or in the analysis of people's focus-of-attention. The paper addresses the issue of head pose estimation, and makes two contributions. First it introduces a database of more than 2 hours of video with head pose annotation involving people engaged in office activities or meeting discussion. The database will be made publicly available. The second is an algorithm which couples tracking and head pose estimation in a mixed-state particle filter. The approach combines the robustness of color-based tracking by exploiting skin head/face models with the localization accuracy of texture-based head models, as demonstrated by the reported experiments.