HYBRID SPEAKER TRACKING IN AN AUTOMATED LECTURE ROOM
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Abstract:

We present a hybrid speaker tracking scheme based on a single pan/tilt/zoom (PTZ) camera in an automated lecture capturing system. Given that the camera's video resolution is higher than the required output resolution, we frame the output video as a sub-region of the camera's input video. This allows us to track the speaker both digitally and mechanically. Digital tracking has the advantage of being smooth, and mechanical tracking can cover a wide area. The hybrid tracking achieves the benefits of both worlds. In addition to hybrid tracking, we present an intelligent pan/zoom selection scheme to improve the aestheticity of the lecture scene.