Pose for Action - Action for Pose
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1 Introduction

Motivations:
- Human activity recognition and body pose estimation provide useful information to understand human motion and interactions.
- Both tasks are closely related and provide strong cues about each other.
- Body pose information is shown to help significantly for action recognition [1][2].
- Utilizing action recognition to improve pose estimation is not studied extensively.

Goals:
- Recognize human activity in videos using body pose estimation. (Pose for Action)
- Utilize human activity information to improve body pose estimation. (Action for Pose)

Contributions:
- An Action Conditioned Pictorial Structure (ACPS) model for 2D human pose estimation that incorporates priors over activities.
- Activities are inferred and integrated in ACPS with a very small computational overhead.
- Learn pose configuration and appearance sharing within a conditional regression forest. [3]

References