Exocentric Sensing – Proxemics

Existing computer vision techniques for face detection [7] can provide a wealth of non-verbal cues for social interaction, including the number of people in the user’s visual field, where people are located relative to the user, coarse information related to gaze direction (pose estimation algorithms could be used to extract finer estimates of pose), and the approximate distance of the person from the user based on the size of the face image. We leverage the existing framework on our Social Interaction Assistant [5] to obtain all the above mentioned cues.