A Vision-based Affective Computing System Jieyu Zhao Ningbo University, China

Emotion plays an important role in human communication. Although humans recognize facial expression virtually without effort, it remains a challenge for a computer to recognize user's facial expression and react in a natural and affective way. Affective computing is aimed at developing a system which is able to recognize and express emotions as human do. This presentation will give an overview of the facial expression recognition and animation, and show some possible solutions to this difficult task. Some theoretical models and approaches will be discussed (mainly probabilistic graphical models). A comparison of the human visual system and computer vision system will probably give us some useful insight.