

Visualizing Apparent Personality Analysis with Deep Residual Networks

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Automatic prediction of personality traits is a subjective task that has recently received much attention. Specifically, automatic apparent personality trait prediction from multimodal data has emerged as a hot topic within the field of computer vision and, more particularly, the so called "looking at people" sub-field. Considering "apparent" personality traits as opposed to real ones considerably reduces the subjectivity of the task. The real world applications are encountered in a wide range of domains, including entertainment, health, human computer interaction, recruitment and security. Predictive models of personality traits are useful

for individuals in many scenarios (e.g., preparing for job interviews, preparing for public speaking). However, these predictions in and of themselves might be deemed to be untrustworthy without human understandable supportive evidence. Through a series of experiments on a recently released benchmark dataset for automatic apparent personality trait prediction, this paper characterizes the audio and visual information that is used by a state-of-the-art model while making its predictions, so as to provide such supportive evidence by explaining predictions made. Additionally, the paper describes a new web application, which gives feedback on apparent personality traits of its users by combining model predictions with their explanations.