

UNIVERSITY OF SOUTH FLORIDA

Major Research Area Paper Presentation

Towards Affective Behavior Analytics using Quantified Facial Expressiveness

by

Md Taufeeq Uddin

For the Ph.D. degree in Computer Science and Engineering

The quantified measurement of facial expressiveness is crucial to analyze human affective behavior at scale. Unfortunately, methods for expressiveness quantification at the video frame-level are largely unexplored, unlike the study of discrete expression. In this talk, we present an algorithm that quantifies facial expressiveness using a bounded, continuous expressiveness score using multimodal facial features, such as action units (AUs), landmarks, head pose, and gaze. The proposed algorithm more heavily weights AUs with high intensities and large temporal changes. The proposed algorithm can compute the expressiveness in terms of discrete expression and can be used to perform tasks including facial behavior tracking and subjectivity quantification in context. Our results on benchmark datasets show the proposed algorithm is effective in terms of capturing temporal changes and expressiveness, measuring subjective differences in context, and extracting useful insight.

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4:00 PM EST

Online (MS Teams; link: <https://bit.ly/3mXuuV2>)

Please email mdtaufeeq@usf.edu for details

THE PUBLIC IS INVITED

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College of Engineering

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