

## Recent Advances in Emotion AI

Emotion AI, also referred to as Affective Computing, is a rapidly evolving field within artificial intelligence. Human emotions are expressed through multiple modalities such as speech, facial expressions, gestures and biosignals. Affective computing aims to recognize, interpret, process, and replicate these emotions from multimodal emotional datasets through the application of artificial intelligence techniques. In recent years, deep learning models have played a significant role in affective computing by automatically identifying complex patterns in data. Thus, new real-life scenarios have emerged and human-computer interaction has extended to various domains such as healthcare, security, business intelligence, and educational platforms.

To fully understand, predict, and generate affective processes, information integration is required not only across various modalities such as speech, images, and text but also throughout contextual factors like gender, personality, relationships, situation, and culture. This poses new challenges for affective computing. Additionally, ethical aspects related to the potential consequences of intelligent artificial intelligence equipped with emotional intelligence should be addressed.

This special session, focusing on "Recent Advances in Emotion AI", aims to gather experts from academia and industry worldwide. The objective is to engage in discussions and presentations highlighting the latest developments in affective computing. Topics include, but are not limited to, the following:

- Emotion recognition and synthesis
- Multimodal affective computing
- Novel emotional features to improve generality and robustness
- New machine learning architectures for Emotion AI
- Datasets, annotation protocols and bias related issues
- Emotion AI for mobile devices
- Context-aware Emotion AI
- Affective applications and new challenges
- Ethics in Affective Computing