Leveraging Multimodal AI to Study Psychopathology From Naturalistic Behaviors

Participants:

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Symposium Synopsis:

Large language models, and more recently multimodal models, are increasingly being leveraged to study naturalistic behaviors, in order to identify patterns that could predict the onset, course, and treatment response in various psychopathological conditions, such as depression and psychosis. In this symposium, we present examples of challenges and breakthroughs in harnessing large computational models to measure multimodal aspects of social communication, ranging from lower sensory features such as vocal acoustics and facial cues, to higher order abstract properties, including sentiment, agency, and ideational content. Together, these approaches illustrate the potential of multimodal computational approaches to identify latent behavioral patterns that are reliable predictors of psychopathology. The symposium will consist of four talks, covering the range of multimodal features available in speech samples.