

Human Attention and Communication Mediated via Machine Learning

jeudi 20 avril 2023 12:00 (30 minutes)

The beauty of wavelets is that they are intuitively graspable while being grounded in deep mathematical foundations.

As Gabor wavelets are representative of visual perceptive fields, wavelets have been used to model biological principles of vision.

Wavelets have in turn proved useful to extract information from brain activity, by focusing on repeating patterns that emerge from noise.

While machines are particularly apt at recognizing repetitive patterns, humans are experts at detecting departures from regularity.

Neural markers related to departures from regularity are correlates of human attention, independently of sensory modality.

Machines can be trained to measure this trace of attention in neural signals, which can provide novel ways to mediate communication between humans.

Orateur: Prof. CLERC, Maureen (INRIA)