

## Séminaire Jonathan Gratch

Mercredi 6 Juillet 2016 à 14h00

Télécom-ParisTech, 46 rue Barrault, Paris

### Amphithéâtre B312

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## Beware of computers bearing smiles: A review of research into machines that understand and shape human emotion

**Abstract:** Affective Computing is the field of research directed at creating technology that recognizes, interprets, simulates and stimulates human emotion. In this talk, I will broadly overview my fifteen years of effort in advancing this nascent field, and emphasize the rich interdisciplinary connections between computational and scientific approaches to emotion. I will touch on several broad questions: Can a machine understand human emotion? To what end? Can a machine “have” emotion, and how would this impact the humans that interact with them? I will address these questions in the context of several domains and applications, including medical interviews, economic decision-making and computer games. I will discuss both the theoretical consequences of these findings for human cognition as well as their practical implications for human-computer, computer-mediated and human-robot interaction. Throughout, I will argue the need for an interdisciplinary partnership between the social and computational sciences around to topic of emotion.

**Short bio:** Jonathan Gratch (<http://www.ict.usc.edu/~gratch>) is a Research Professor of Computer Science and Psychology at the University of Southern California (USC) and Director for Virtual Human Research at the USC’s Institute for Creative Technologies. He completed his Ph.D. in Computer Science at the University of Illinois in Urban-Champaign in 1995. Dr. Gratch’s research focuses on computational models of human cognitive and social processes, especially emotion, and explores these models’ role in shaping human-computer interactions in virtual environments. He studies the relationship between cognition and emotion, the cognitive processes underlying emotional responses, and the influence of emotion on decision making and physical behavior. He is the founding Editor-in-Chief of IEEE’s Transactions on Affective Computing, Associate Editor of Emotion Review and the Journal of Autonomous Agents and Multiagent Systems, and former President of the Association for the Advancement of Affective Computing (AAAC). He is a AAAI



Fellow, a SIGART Autonomous Agent's Award recipient, a Senior Member of IEEE, and member of the International Society for Research on Emotion (ISRE). Dr. Gratch is the author of over 200 technical articles.