

UW CENTER FOR PATTERN ANALYSIS AND MACHINE INTELLIGENCE

GRADUATE SEMINAR SERIES

Perception and Generation of Affective Movements

Speaker: Ali-Akbar Samadani

Date: January 18, 2012

Time: 4:30 pm - 5 pm

Place: E5 (5128) Refreshments will be served

Abstract :

Humans communicate affect through a variety of channels, such as facial expressions, voice and body movement, and are adept at estimating the affective states of others. Body movements are important observable features of underlying affective states. The psychology literature reports on the critical role of movement cues in conveying life-like affective expressions for both anthropomorphic and non-anthropomorphic structures. It is therefore critical in human-machine interaction to be able to recognize and generate affective movements. However, which specific movement features are critical to affect recognition and generation is not precisely known, and the selection of features for affective movement recognition and generation algorithms is usually done in an ad-hoc manner. The proposed research aims at developing a systematic approach for identifying movement features that can be used to discriminate between different affective movements, and to generate movements that convey a desired affective expression on anthropomorphic and non-anthropomorphic structures. The outcome of this research will enable advances in machine perception and affective computing, paving the path toward more expressive systems. In particular, the outcome of this research will support development of non-anthropomorphic interactive machines with the capability of displaying movements with recognizable affective content; hence creating an engaging human-machine interaction.

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