Bachelor's/Master's Project Announcement

Topic: Communicating Emotions by Playing the Piano

Project Description:

This project would involve designing and implementing a system that would enable a computer to analyze a piano performance and infer the intended emotion through the human's playing style. This could be done, for example, by using the note information (MIDI) or audio, or both, as inputs to an algorithm that employs machine learning models and designed heuristics working together to arrive at emotion predictions. A complementary task would be to enable the computer to respond by playing according to a target emotion. This would require constructing a suitable interaction platform to enable participants to play this game with the computer. You are encouraged to think of creative ways to facilitate this human-computer interaction task, in a way that is interesting for a general audience.

Depending on background, creativity, and dedication of the candidate, we may also be able to offer some financial support.

Contact: Prof. Gerhard Widmer (Gerhard.Widmer@jku.at)