Mechanical & Industrial Engineering
UNIVERSITY OF TORONTO

Thesis Projects (MIE498 H/Y) 2018–2019

Title/Topic: Machine Learning classification of mental state

Description:

Adaptive systems are those that can appropriately modify their behaviour to fit the current context. An adaptive system needs a trigger, which is a context-based cue that initiates an adaptation. This project examines user-state triggers, which are triggers based on a change in the user state, to improve upon machine learning classifiers that can distinguish between users' mental states. These classifiers will take in user interaction data, determine the mental state of the user, and then trigger adaptations to an interface in order to facilitate appropriate mental states. Experience with python and knowledge of machine learning methods is required (keras, tensorflow or comparable ML libraries preferred; experience with RNN/LSTM is a plus.

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