

# **A Computational Model of Emotion and Personality in Mastery Motivational Oriented Students**

**Somayeh Fatahi**

Dalhousie University, University of Tehran

**Hadi Moradi**

University of Tehran

**Ali Nouri Zonoz**

University of Tehran

**Abstract:** The capability of estimating emotions is an important feature needed for intelligent systems to interact with humans. . In this paper, we propose a computational model to calculate a user's desirability as one of the most important emotions, especially in Intelligent Tutoring Systems (ITS). The main purpose of this research is to find a relationship between personality and desirability in virtual learning environments. The proposed model can determine the desirability of mastery motivational oriented students considering their personality, which is determined using MBTI. Based on the OCC emotion model, the goals and events are considered which can affect desirability. Then a cognitive map is developed between the personality dimensions and the goals and events. The proposed model has been implemented and evaluated in a simulated virtual learning environment and the results show that the proposed model can formulate the relationship between personality and desirability with high precision.