1144-68-338 **Kourosh Modarresi*** (kouroshm@alumni.stanford.edu). *Effectiveness of Representation Learning for the Analysis of Human Behavior.*

The digital space is increasingly the main venue that individuals spend their time and conduct their businesses. The phenomenon has led to an explosion of online experience data resulting from human interaction with the contents in the digital space. Obviously, many businesses have vital interest in analyzing this data and using its insights to attract more online users to their contents and products. The human online-behavior data has also attracted the attention of AI and machine learning scientists to try to understand the patterns hidden in the data. It has been observed that human behavior entails very complex features. Studying these complex features requires the deployment of models that could deal with this high complexity. A major contribution of deep neural network model is in its application of "hierarchical representation learning" approach. This "feature representation" aspect of deep learning models make it possible to represent many complex structures and patterns. This work explains how deep learning models, using representation learning, could be applied effectively in the analysis of human behavior data. (Received August 28, 2018)