



The rising STAR of Texas

Discrete Mathematics Seminar

Time: Friday, October 12, 2018, 2:15-3:15 PM
Room: 330 Derrick Hall
Title: A Facial Expression Recognition Approach Using DCNN for Autistic Children to Identify Emotions
Speaker: Md Inzamam Ul Haque, Graduate Student, Ingram School of Engineering, Texas State University

Abstract:

In this paper, an initial work of a research is discussed which is to teach young autistic children recognizing human facial expression with the help of computer vision and image processing. This paper mostly discusses the initial work of facial expression recognition using a deep convolutional neural network. The Kaggle's FER2013 dataset has been used to train and experiment with a deep convolutional neural network model. Once a satisfactory result is achieved, the dataset is modified with pictures of four different lighting conditions and each of these datasets is again trained with the same model. This is necessary for the end goal of the research which is to recognize facial expression in any possible environment. Finally, the comparison between results with different datasets is discussed and future work of the project is outlined.