Report

Period: Oct 10-16, 2014

Task: **Simulating and estimating multimodal emotion recognition using different multimodal emotion databases**

Subtasks: **SVM training and classification, Performing simple actions on NAO, Analyzing facial and vocal data**

1 Task 1

SAVEE database consists of recordings from 4 male actors in 7 different emotions. I have simulated the following vocal features of one of those males called DC: pitch, intensity, formants and bandwidths, pulses and spectrum using PRAAT software program. I have analysed the pitch and intensity of 'happiness', 'sadness' and 'neutral' emotions of DC on Matlab using SVM binary classification which are distinct for each emotion studied. I received the following recognition rates for each of those three emotions:

'happiness' – 1

'sadness' - 0.73

'neutral' - 1

2 Task 2

Using Choregraph program perform simple action on the NAO humanoid robot.

3 Task 3

Analysing the facial and vocal emotion recognition by AV clips recorded on the Kinect camera.

Tasks for the Next Week

1. **I am planning to use other vocal features highlighted above in my classification and apply it to the other 4 emotions as well not only for DC but also for other 3 male actors.**
2. **Simulating the results of Multimodal Emotion Recognition of four and five categories by using ensemble of trees of binary SVM classifiers.**