**CS5543 Real-Time Big Data Analytics**

**LAB ASSIGNMENT #9**

One submission per Project Team

Lab Submission through the following form before 10/26 (W) 11:59PM.

[https://goo.gl/forms/HGJ0VR8U2dH1K9Yv1](https://goo.gl/forms/HGJ0VR8U2dH1K9Yv1" \t "_blank)

Development of Audio Classification Application: Implement an audio classification application for an interesting use-case related to your project.

1. Extract audio features either from audio streams from smartphone (e.g., android) or from videos
2. Send the audio features to Storm through Kafka as streaming data.
3. Use your own Classification Model based on Random Forest / Decision Tree built on Spark MLlib with the audio features (audio feature files) extracted from Client. Report F-Measure, Precision, Recall and Confusion Matrix. (Similar to Lab 5)
4. Impalement Storm topology for audio recognition (following the steps shown in Tutorial 9)

Submit your Github project for Lab Assignments with source code, input and output data and wiki page containing the report for your lab Assignment. Include screenshots to your report.

Submit a 1-2 min panapto video on blackboard showing your implementation with brief explanation.