## ABSTRACT

Problem that always happen when we do video conference is the picture from the opposite speaker seems not smooth. One of the factor that cause this problem is because of too much traffic in network. This can be caused of much video conference data sent through the network, so it make queue which cause data can't arrive on time.

An alternative will be build to delete problems in delivering a lot of data in this graduating paper. Unsupervised Segmentation and Object Tracking method will be introduced in this research. This methods will detect which frame has changed from so much frame in video conference process. Frame which will be sent is frame that has changed. For comparison in using uncompressed video data MPEG4 method will be used.

The test comparing mean time of the compression, mean time of decompression and size ratio of the compression result with USOT method and MPEG-4 method. Conclusion obtained show that USOT method require longer time in compression and decompression process and send bigger size of data than MPEG-4 method. But USOT method still can be used as an alternative method in video conference.

## Keyword : video conference, scene detection, Network, frame, MPEG4.