## **Summary**

This paper introduce a novel approach for face image segmentation base on Voronoi Diagram (VD) technique. We used intensity value and region pixels value for enhance preprocessing step on gray-scale image. The method for locating and extraction face/head boundary are applied feature point of the original image which are useful dual tessellation of the VD is known as Delaunay Triangulation (DT). A target of experiment is reported face image segmentation that uses still face image from BioID database. The result of this method clearly demonstrates the segmentation which performs in comparison with another method in quality of gray value and speed. It indicates a new alternative approach that can be used for face segmentation, detection, and extraction which are the next steps of the entire face recognition system.