## ABSTRACT

*Multispectral image* represent image which consist of a number of spectrum. This Image type can be found at result of mapping done by satellite. Main problem from identifying an mapping object at *multispecral image* is correctness and speed of process. Identify and object analysis *multispectral image* by using spatial information like size measure, form, texture, pattern, association shadow and site.

Method weared to identification object that is Segmentation. Segmentation is separation of object become part of thats object .This Class method will integrating with *clustering* method and *spectral reduction* to obtain the quality of optimal image. While used by clustering method is clustering of radius. For the spectral reduction used by *Principal Component Analysis* (PCA).

Designed Comparison of object Identification *multispectral image* based on *clustering* and *spectral reduction* at this final project can identification an multispectral image object with more optimal correctness.

Key word: Multispectral image, clustering, spectral reduction, Principal Component Analysis (PCA)

Program Sarjana Tekník Informatíka