



# General Sir John Kotelawala Defense University

## Electrical, Electronic & Telecommunication Engineering

### ET3112 – Image Processing and Machine Vision

#### Practical V - Compose a program to find an image threshold based on the inter-means algorithm

KDU Reg

Intake

Marks

#### Objective

To analyze image threshold based on the inter-means algorithm.

#### Procedure

1. Write a python script to find an image threshold based on the inter-means algorithm.
2. Then apply your algorithm to two images and upload your script with the original and segmented images
3. You may use OpenCV or similar library only for loading.
4. Save your program file and name your program filename as your index number.
5. All other functions should be in your native code.
6. You must also submit an executable version if your code is in any programming environment.
7. Guide following steps when implementing the code.

##### I. Define functions

- Convert to Grayscale
- Estimate initial threshold
- Refine iterative threshold value
- Create binary images

##### II. Process Multiple Images using `intermeans_threshold()`

- ##### III. Prints a message indicating that the thresholding and segmentation operations are complete.