IN BETWEEN FRAME BASED ON MEAN SHIFT CLUSTERING AND LINIER INTERPOLATION FOR ANIMATION VIDEO

Akhmad Syahidil Amien (2206100526)

Advisor I : Mochamad Hariadi, ST., MSc., PhD.
Advisor II : Dr. I Ketut Eddy Purnama, ST., MT.

Abstract

Video animation consisting of frames manually drawn by hand in large quantities. Frames are displayed sequentially. A good video animation should have a lot of frames so that the movement of object is more smooth.

Insertion of the frame or usually called in Between frame is a way of multiplying the number of frames. The movement of objects in one frame with the frame nearby can be detected using Mean Shift Clustering method. Clustering method using K-Means that change color in one frame into a digital color system CIELAB and grouping that color and detect the movement of objects in the next frame. After that the Linear Interpolation method makes new frame emerging inter-frame. After that returns the frame that have changed color to RGB.

The process of in between frames with 99 frames as input results 197 frames. The percentage of frames increased almost two-fold. These makes motion of animation video more smooth.

Keywords: In Between Frame, K-Means, CIELAB, Linier Interpolation, RGB.