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Real Time Video Summarization Using Anchor Free Model for Capturing Events

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Abstract

Video summarizations can quickly and effectively collect the necessary data from huge surveillance datasets by identifying key video data in the surveillance stream. In this work, we utilize anchor free method to summarize the video of a surveillance camera. The anchor-free approach ignores temporal proposals that are pre-defined. It also predicts important values and segment locations directly. The localization of an action using temporal points is aided by an anchor-free action localization module. This module defines an action instance as a point with lengths to the starting and ending boundaries, reducing pre-defined anchor limitations on action localization and duration. For real-time working, this work created video shots and passed each shot to our model to generate a summary of the video. The evaluation is done on this model, on custom dataset, which is specially created for our application

Keywords

Real Time Video Summarization, Region Proposal network, Dataset, Features and shot creation.