

Customized Video Summarization with Thumbnail Containers and 2D CNN

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Abstract: *This project focuses on acquiring customized video summaries using thumbnail container-based summarization framework and 2D CNN model to select and extract specific features from thumbnails. This framework creates a custom keyshot summary for two or more concurrent users by leveraging the computing power of the user's device. The most advanced methods that collect and analyze complete video data to create video summaries consume a lot of computing power. In this context, we use the thumbnail containers framework which implements light thumbnails to manage the complex detection of events. This minimizes computational complexity and increases communication and storage performance by overcoming computational and privacy issues in resource constrained end-user environments. We aim on developing a user interactive customized video summarization tool which will be trained utilizing diverse datasets leading to the generation of personalized video summaries for feature-length videos.*

Keywords: Video summarization, 2D CNN, thumbnail containers, keyframes

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