

Video Data Mining

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Abstract: *In recent years, the exponential growth of multimedia content—particularly video—has created a demand for efficient storage, management, and retrieval systems. This paper proposes a real-time video streaming web portal that leverages private cloud infrastructure to store and manage a large video repository. The system enables automatic video uploads based on a predefined schedule, categorizes videos using clustering algorithms, and supports content-based retrieval through indexing and prediction techniques. Users can watch videos online, download them based on summarized metadata, and share them directly with other registered users within the platform. The system also features a user rating mechanism that assesses video popularity, enabling the automatic removal of low-engagement content to optimize storage usage and improve overall user experience. This integrated approach improves accessibility, content organization, and system scalability for video-based applications across various domains.*

Keywords: Video streaming, cloud computing, clustering, indexing, prediction, content-based retrieval, private cloud, video sharing.

