MGM'S College of Engineering, Nanded

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

AI based frame interpolation, video geneartion and display system for WMS services

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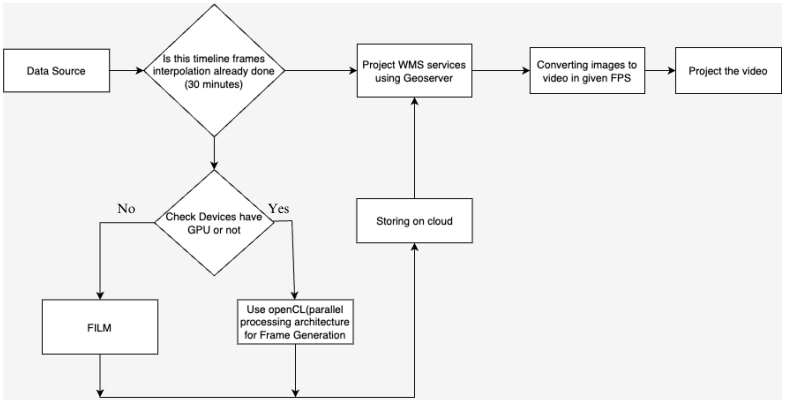
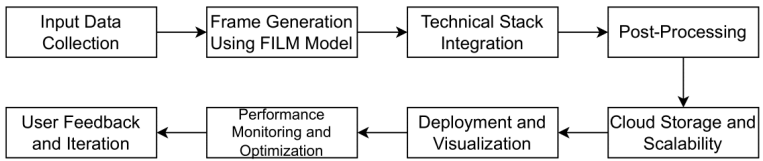
Introduction: The proposed system allows users to input a start date, end date, frame per second and bounding box (BBOX) to fetch satellite images from a Web Map Service (WMS). Using AI-based frame interpolation, the system generates smooth transitions by reducing the gaps between images captured at regular intervals (e.g., from every 30 minutes to every 10 minutes). This creates a more continuous and fluid video, which is displayed on an interactive map, enhancing visualization and improving the overall user experience.

System Architecture:



Methodology:



Conclusion: The project "Advanced Images and Videos Analysis Using Computer Vision and Artificial Intelligence (AI)" enhances video quality using the Frame Interpolation for Moving Objects (FILM) model. It achieves smoother transitions and improved temporal resolution, benefiting applications like satellite imagery, video editing, and virtual reality. This solution reduces production costs, optimizes resource usage, and delivers high-quality visuals.

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