

Objective :- The primary objective of the solution is to develop a computer vision algorithm that can accurately insert an advertisement image into a video, ensuring that the advertisement integrates seamlessly with the scene while avoiding overlapping with occluding objects or interfering with important visual elements.

Used Libraries :-

- Opencv
- Numpy

Parameters

- `--input_video`: Path to the input video file.
- `--advertisement`: Path to the advertisement image file.
- `--output_video`: Path to save the output video file with the inserted advertisement.

Future Improvements

- Integration of advanced object detection and tracking algorithms for improved accuracy and robustness.
- Implementation of more sophisticated occlusion handling strategies, such as semantic inpainting.
- Support for additional advertisement insertion formats, such as video advertisements.

Conclusion

The Ad Image Insertion in Video with Occlusion Handling solution provides a robust and efficient method for seamlessly integrating advertisement images into videos while gracefully handling occlusions.