- Every Picture Tells a Story: Generating Sentences from Images:
 <u>https://www.researchgate.net/publication/221303952_Every_Picture_Tells_a_Story_Generating_Sentences_from_Images_</u>
- 3. The Use of Video Captioning For Fostering Physical Activity https://www.academia.edu/69366209/The_Use_of_Video_Captioning_for_Fostering_Physical_Activity (page: 3 encoder decoder)
- 4. Key Clips and Key Frames Extraction of Videos Based on Deep Learning: https://iopscience.iop.org/article/10.1088/1742-6596/2025/1/012018/pdf
- 5. Self-Supervised Learning to Detect Key Frames in Videos: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7731244/
- 6. Show and Tell: A Neural Image Caption Generator: https://arxiv.org/pdf/1411.4555v2.pdf
- Video Storytelling: Textual Summaries for Events https://arxiv.org/pdf/1807.09418.pdf
- 8. Deep Learning-Based Short Story Generation for an Image Using the Encoder-Decoder Structure https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9512087

Algorithms/libraries:

1.Pixellib- Image segmentation and object detection

Requires: Tensorflow

2. Mask R-CNN- detects objects in an image and generates a high-quality segmentation mask for each instance

Related Projects:

 Image to story <u>https://github.com/ryankiros/neural-storyteller</u>

How does it work?

- 1. Train a recurrent neural network (RNN) decoder on romance novels.
- 2. Each passage from a novel is mapped to a skip-thought vector.

- 3. Conditions RNN on skip-thought vector & generate the encoded passage.
- 4. Train a visual-semantic embedding between <u>COCO</u> images and captions.

 Captions and images are mapped into a common vector space.
- 5. After training, embed new images and retrieve captions.

Queries

- 1. Find a genre and make the model based on that?
- 2. To train deep learning models, high configured PC and GPU are needed sikeee
- 3. Key frame extraction vs no extraction

BEST ARTICLE:

https://medium.com/@samim/generating-stories-about-images-d163ba41e4ed