

rescale

January 31, 2024

```
[ ]: import cv2 as cv
      # Rescaling video and images making them smaller
      img = cv.imread('Images/cat.jpg')
      cv.imshow('Cat', img)
```

```
[ ]: def rescaleFrame(frame, scale= 0.75):
      # Images, Videos and Live Video
      width = int(frame.shape[1] * scale)# frame.shape[1] = width
      height = int(frame.shape[0] * scale)# frame.shape[0] = height
```

```
[ ]: dimensions = (width, height)
```

```
[ ]: return cv.resize(frame, dimensions, interpolation= cv.INTER_AREA)
```

escale a image

```
[ ]: resized_image = rescaleFrame(img)
      cv.imshow('Image', resized_image)
```

hange the resolution

```
[ ]: def changeRes(width, height):
      # Only for live video
      capture.set(3, width)# 3 = width
      capture.set(4, height)# 4 = height
```

Rescale a video

Create a VideoCapture object

```
[ ]: capture = cv.VideoCapture('Videos/squirrel.mp4')
```

```
[ ]: while True:
      # Read the next frame from the video
      isTrue, frame = capture.read()
      frame_resized = rescaleFrame(frame)

      # Display the frame
      cv.imshow('Video', frame)
```

```
cv.imshow('Video Resized', frame_resized)
cv.imshow()

# Break the loop if 'd' key is pressed
if cv.waitKey(20) & 0xFF == ord('d'):
    break
```

Release the VideoCapture object and close all windows

```
[ ]: capture.release()
      cv.destroyAllWindows()
```