from google.colab import files

import cv2

from matplotlib import pyplot as plt

uploaded = files.upload()

filename = list(uploaded.keys())[0]

image = cv2.imread(filename)

image = cv2.cvtColor(image, cv2.COLOR\_BGR2RGB)

scale\_up = 2.0

scale\_down = 0.4

height, width = image.shape[:2]

new\_size\_up = (int(width \* scale\_up), int(height \* scale\_up))

new\_size\_down = (int(width \* scale\_down), int(height \* scale\_down))

scaled\_up = cv2.resize(image, new\_size\_up, interpolation=cv2.INTER\_LINEAR)

scaled\_down = cv2.resize(image, new\_size\_down, interpolation=cv2.INTER\_AREA)

plt.figure(figsize=(15, 5))

plt.subplot(1, 3, 1)

plt.imshow(scaled\_down)

plt.title(f'Reduced Size ({scale\_down\*100:.0f}%)')

plt.axis('off')

plt.subplot(1, 3, 2)

plt.imshow(image)

plt.title('Original Size')

plt.axis('off')

plt.subplot(1, 3, 3)

plt.imshow(scaled\_up)

plt.title(f'Enlarged Size ({scale\_up\*100:.0f}%)')

plt.axis('off')

plt.show()

