

# Seam Carving Project (10%)

ITCS381 Introduction to Multimedia Systems

**Goal :** The goal of project is to perform content aware image resizing using seam carving algorithm.

## What you need to do :

- 1) Since we are in the middle of COVID-19 situation, this project will be an individual project.
- 2) You will be trying to resize the given image in a non-uniform manner.



- 3) You will write code in MATLAB software to perform content aware image resizing using seam carving algorithm.
- 4) MATLAB live scripts are interactive documents that combine MATLAB code with formatted text, equations, and images in a single environment called the Live Editor. In addition, live scripts store and display output alongside the code that creates it.
- 5) You are given a MATLAB live script file (**seamcarving\_template.mlx**) to be a starting point of doing this project. Follow the guidelines in **seamcarving\_template.mlx** and fill your code in it to produce the final results.
- 6) You are also given a pdf file (**seamcarving\_without\_code.pdf**) which contains sample results that you need to export from your code as a pdf file when you make your final submission.

## What do you need to submit?

- 1) Your MATLAB live script file with naming as **6388xxx\_seamcarving.mlx** that MUST run with the given image.
- 2) The exported pdf naming as **6388xxx\_seamcarving.pdf** of your live script file that shows **your code and your results step by step until the final image which the image is scaled down by half in width.**