ENG 101
Matlab Image Processing

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Images as Matrices

▶ Images are matrices
  ▶ Load black & white image
  ▶ A=imread('rose_BW.jpg');
▶ What is the size of array A?
▶ What is the minimum value?
▶ What is the maximum value?
▶ Create test image
  ▶ A1=A;
▶ For the first 100 rows change all components to 0
▶ Plot the result
  ▶ subplot(121),image(A),subplot(122),image(A1)

▶ *2*

Color Images as Matrices

- Load 'uah_night.jpg'
  - A=imread('uah_night.jpg');
- Download proc_image.m from Canvas
- What is the size of array A?
- Create test image
  - A1=A;
- For the first 100 rows change all components to 0
- Plot the result
  - subplot(121),image(A),subplot(122),image(A1)
- Change all components to maximum (255)/ 100 rows
- Change all R components to maximum 255/ rows
  - Plot the result

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