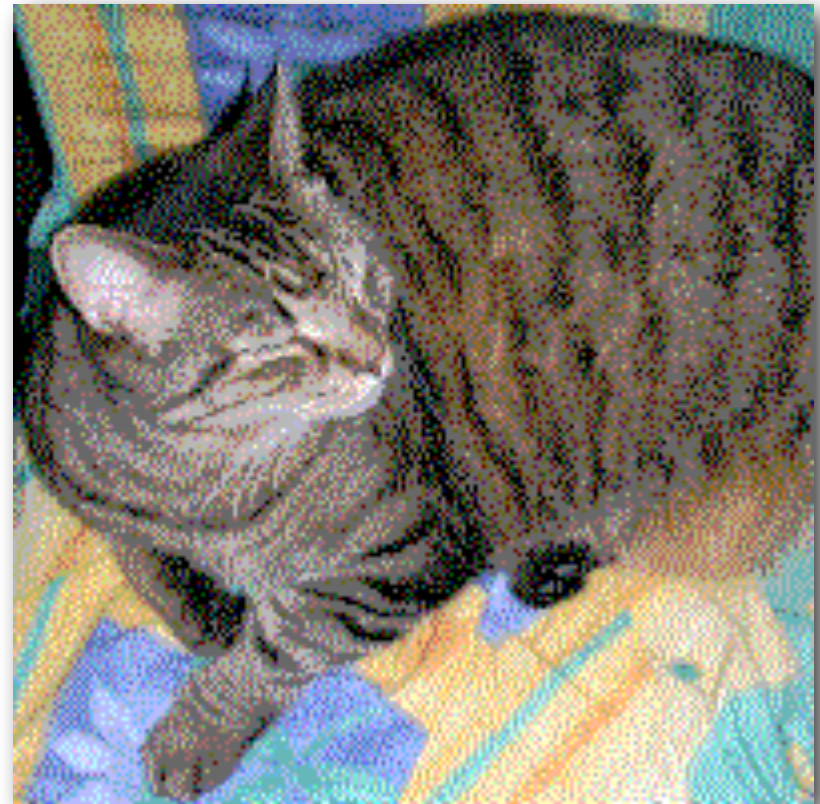
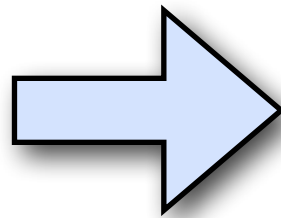


DAM Homework (3)

2017-10-25

Image Watermarking

- Implement Stenography



1. removing all but the last 2 bits of
each color component
2. X 85

Stenography

- Watermarking
 - Input
 - Ic: a color image
 - lw: a watermark image
 - i.e., binary image with watermark information
 - or low resolution color image
 - or you can try QR code image
 - Output
 - I'c: a watermarked image
- Detection:
 - Input
 - Ic: a watermarked color image
 - Output
 - lw: a watermark image
- two command lines

bonus: a simple web based service

Constraints

- Use
 - **Node.JS** and **gm/OpenCV** library
 - or **Python Image Library**
- Deadline:
 - 2017-11-08

Bonus

- True watermarking:
 - slides 29
 - slides 31