

Practical 1.2

An overview on Torch's `image` package

Torch's `image` package

- <https://github.com/torch/image>
- `image` is the Torch7 package for processing images
 - Saving and loading JPEG, PNG, PPM and PGM
 - Simple transformations like translation, scaling and rotation
 - Parameterised transformations like convolutions and warping
 - Simple Drawing Routines like drawing text or a rectangle on an image
 - Graphical user interfaces like display and window
 - Colour Space Conversions from and to RGB, YUV, Lab, and HSL
 - Tensor Constructors for creating Lenna, Gaussian and Laplacian kernels

Overview (I)

- `luarocks list | install`
- `qlua -lenv`
- `image.load()`
- The `=` operator
- `image.scale()`
- `image.display()`
- `Tensor:clone()`
- `Tensor:fill()`

Overview (II)

- `image.display{image, legend, zoom, nrow, padding}`
- `image.toDisplayTensor{input, and like above }`
- `image.savePNG(fileName, image)`
- `image.crop(image, x0, y0, x1, y1)`
- Colour space conversions
- `image.drawText(image, text, x, y, { format })`
- `image.drawRect(image, x0,y0,x1,y1, { format })`