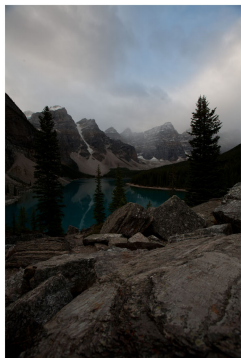


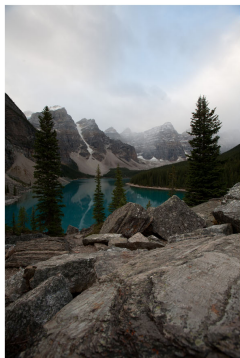
## Lab 2 - Matlab

- ▶ Short HDR theory
- ▶ Explanation of HDR steps
- ▶ HDR & Matlab

# HDR



-2



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+2

<http://blog.LindsayAdlerPhotography.com/hdr-plugins-a-life-saver>

# HDR



<http://blog.LindsayAdlerPhotography.com/hdr-plugins-a-life-saver>

# HDR & Matlab

- ▶ makehdr - Assembles frames of varying exposure levels into a single high dynamic range image.
- ▶ tonemap - Renders high dynamic range image for viewing.

# Matlab's HDR and Tonemap parameters

- ▶ `makehdr` , 'ExposureValue'
- ▶ `tonemap` , 'AdjustLightness' - Clipping to light and dark:  
[0.3 1] vs [0.01 0.7]
- ▶ `tonemap` , 'AdjustSaturation' - Forced to full intensity of a particular color vs equalizing the colors to grayscale
- ▶ `tonemap` , 'NumberOfTiles' - Allowing more freedom to handle different areas separately

## Other useful Matlab commands

- ▶ `imread('filename')`
- ▶ `imwrite(im_var, 'filename')`
- ▶ `montage(im_var_array)` - Display multiple image frames as rectangular montage
- ▶ `subimage(im_var)` - Display multiple images in single figure