



Visualizing and Understanding Convolutional Networks

The Idea

Goal Visualization of input stimuli that excite individual feature maps

Method Attach a Deconvolutional Network to an AlexNet to project activations back to input pixel space

Convolutional Network

- Projects from image space to feature space
- Uses learned filters for convolution
- Uses maxpooling

Deconvolutional Network

- Projects from feature space back to image space
- Uses transposed versions of the same filters
- Creates unpooled maps by saving maximum locations in switches