**Lecture 9 Polls**

**Slide 46**

We can determine if a picture has a flower by scanning it for a flower with an MLP

* True
* False

Scanning a picture for a flower to determine if the picture has a flower in it is strictly the same as analyzing the entire picture with a single large shared-parameter MLP

* True
* False

**Slide 166**

Scanning an input image with an MLP is mathematically equivalent to first scanning it with the individual neurons in the first hidden layer, and then scanning the output maps of the first layer neurons with rest of the network

* True
* False

This operation can be recursed: Scanning the output maps of the first layer with the rest of the network is equivalent to scanning the first layer maps with the second layer, and then scanning the second layer maps with the remaining network

* True
* False

**Slide 205**

Mark all that are true

* Non-distributed scanning requires the output maps of the neurons to be arranged in the same shape as the input
* Non-distributed scanning does not require the output maps of neurons to be arranged in the same shape as the input
* Distributed scanning requires the output maps of the neurons to be arranged in the same shape as the input
* Distributed scanning does not require the output maps of neurons to be arranged in the same shape as the input

**Slide 238 (or when Im closing)**

What are the benefits of distributed scanning (mark all that are true)

* It enables hierarchical composition of patterns, which results in more generalizable models
* It results in greatly reduced number of parameters
* It provides computational advantage through reuse of computation
* It results in reduced memory requirement for intermediate variables during inference