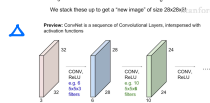
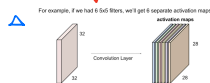
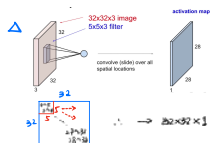
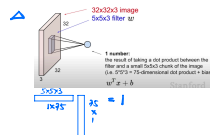
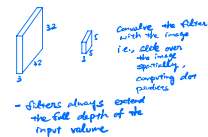


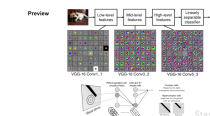
- CNN (convolutional - nets)
- recall fully-connected layer
 $32 \times 32 \times 3$ image (linear)
 3072×1



- convolutional layer
 $32 \times 32 \times 3$ image (preserve spars.)



basically: look for features!
 (high/medium/low)



$$S[x,y] = \sum_{n_1=0}^N \sum_{n_2=0}^N S[n_1,n_2] \cdot f[x-n_1,y-n_2]$$

