

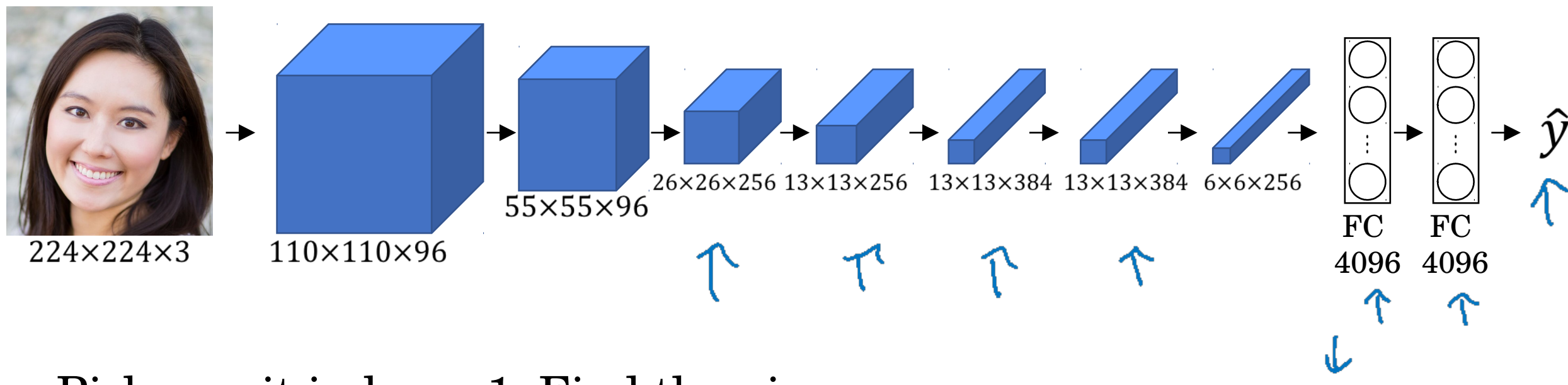


deeplearning.ai

Neural Style Transfer

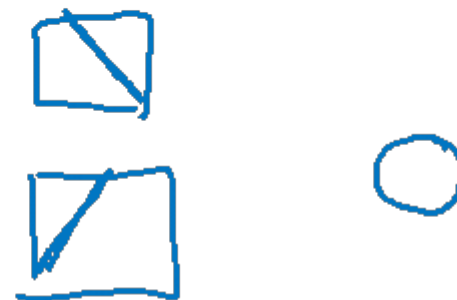
What are deep
ConvNets
learning?

Visualizing what a deep network is learning

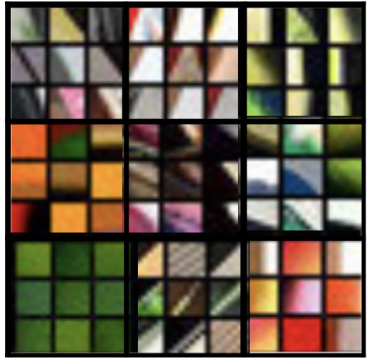


Pick a unit in layer 1. Find the nine image patches that maximize the unit's activation.

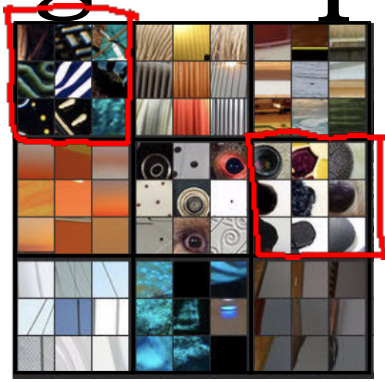
Repeat for other units.



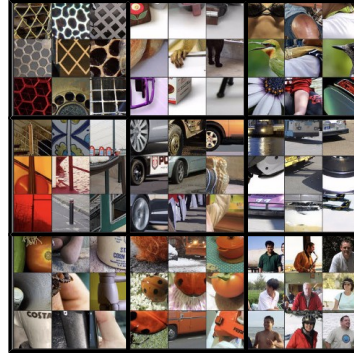
Visualizing deep layers



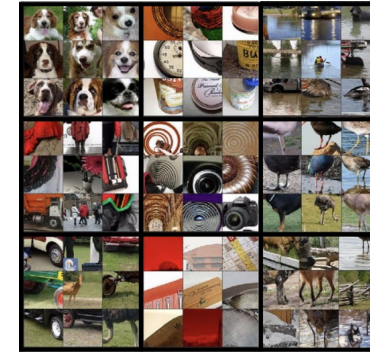
Layer 1



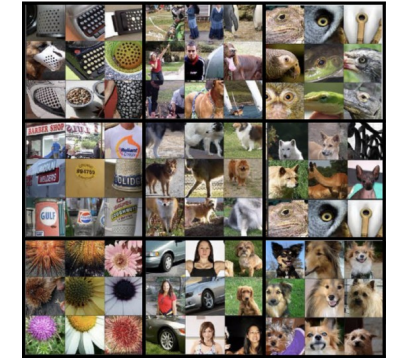
Layer 2



Layer 3

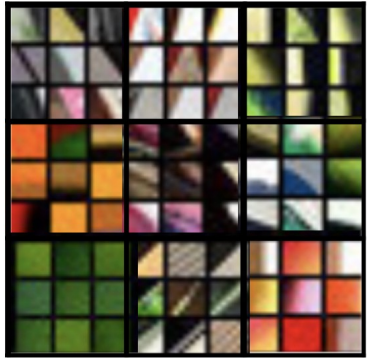


Layer 4

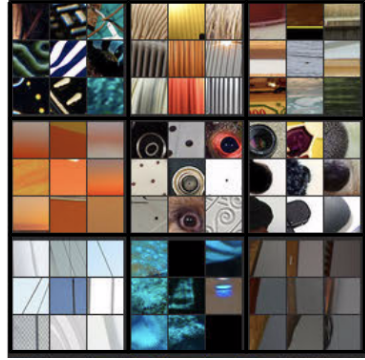


Layer 5

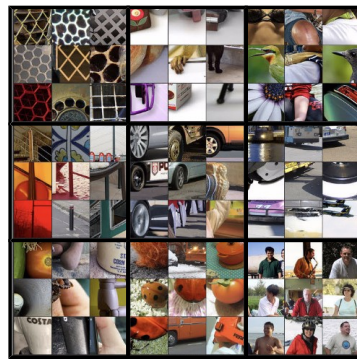
Visualizing deep layers: Layer 1



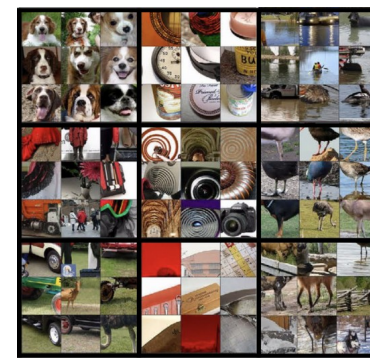
Layer 1



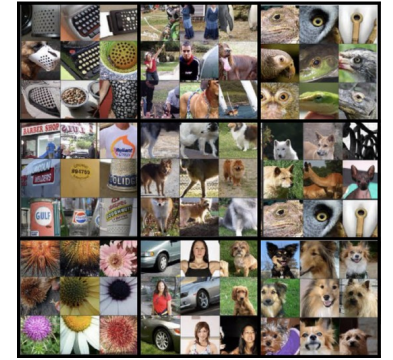
Layer 2



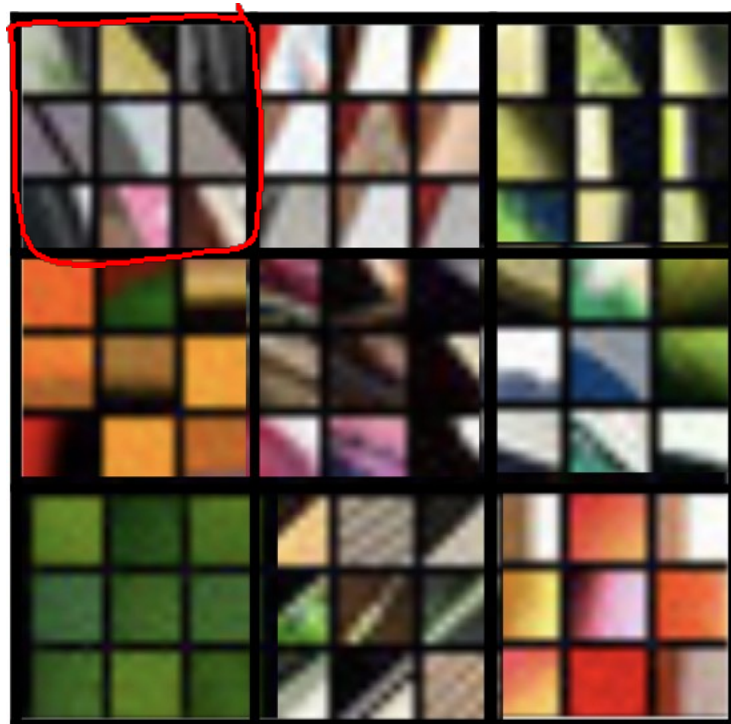
Layer 3



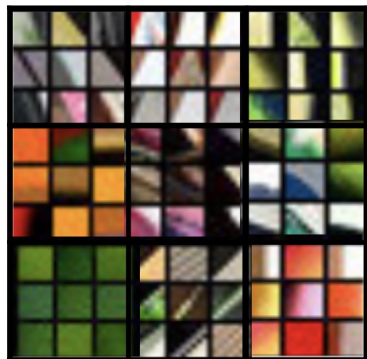
Layer 4



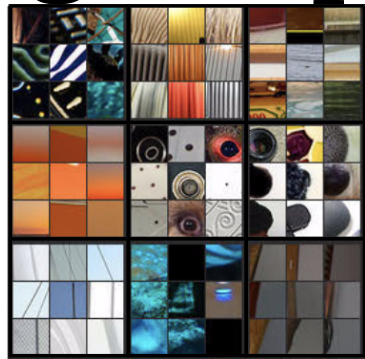
Layer 5



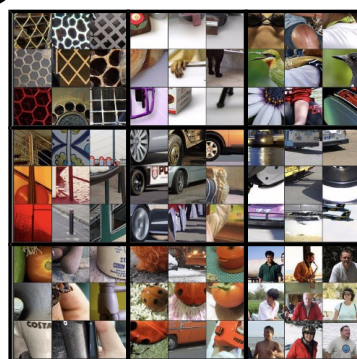
Visualizing deep layers: Layer 2



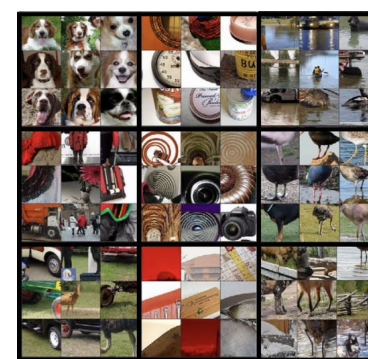
Layer 1



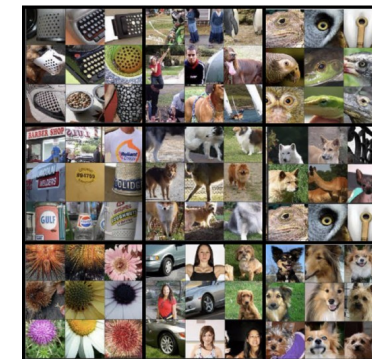
Layer 2



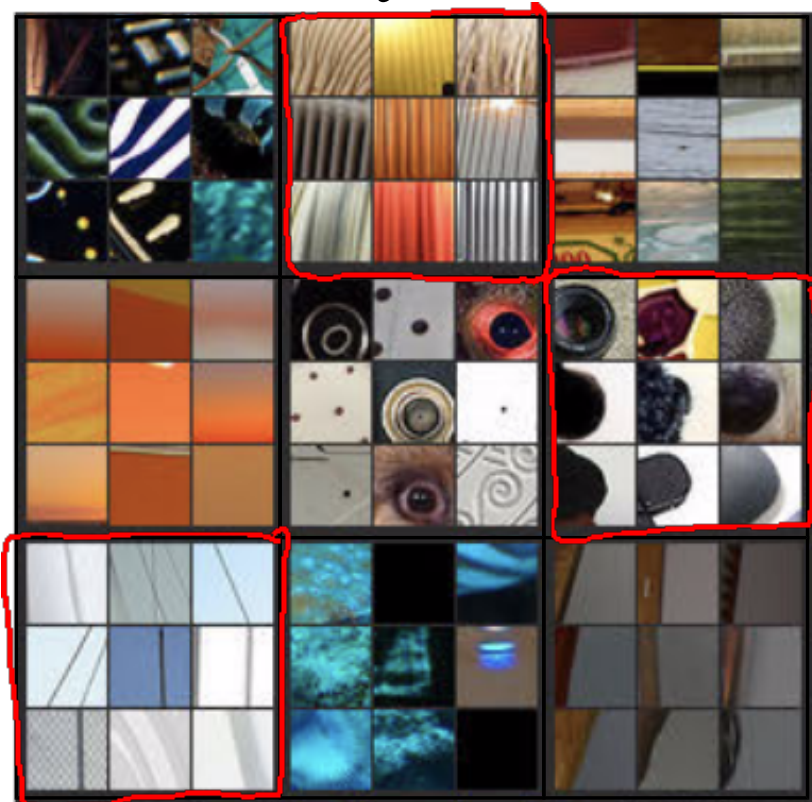
Layer 3



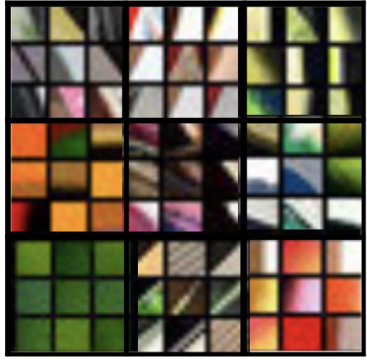
Layer 4



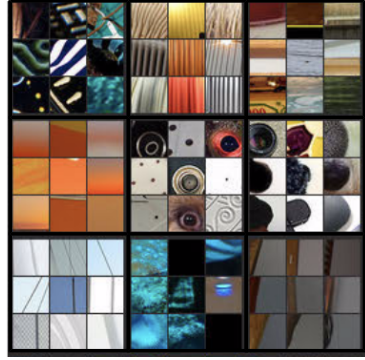
Layer 5



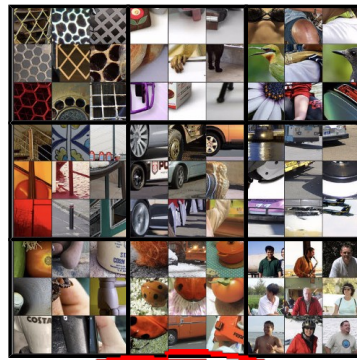
Visualizing deep layers: Layer 3



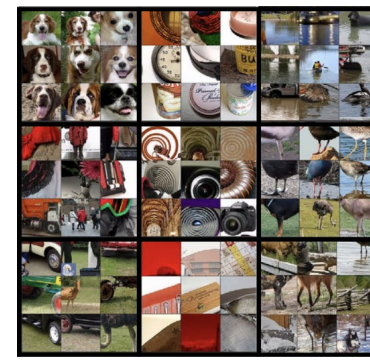
Layer 1



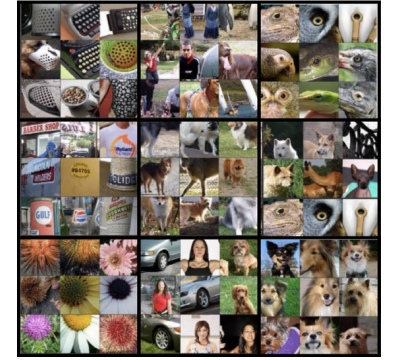
Layer 2



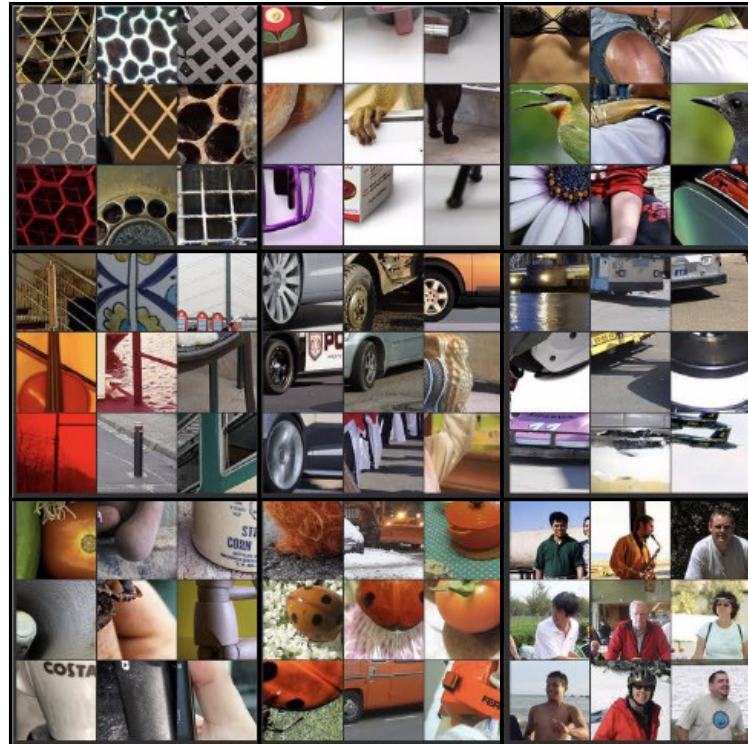
Layer 3



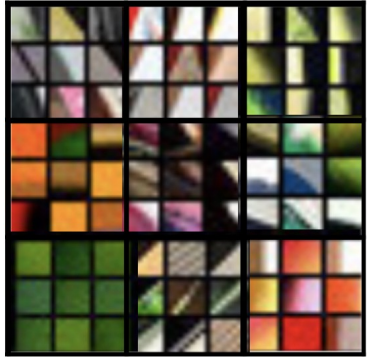
Layer 4



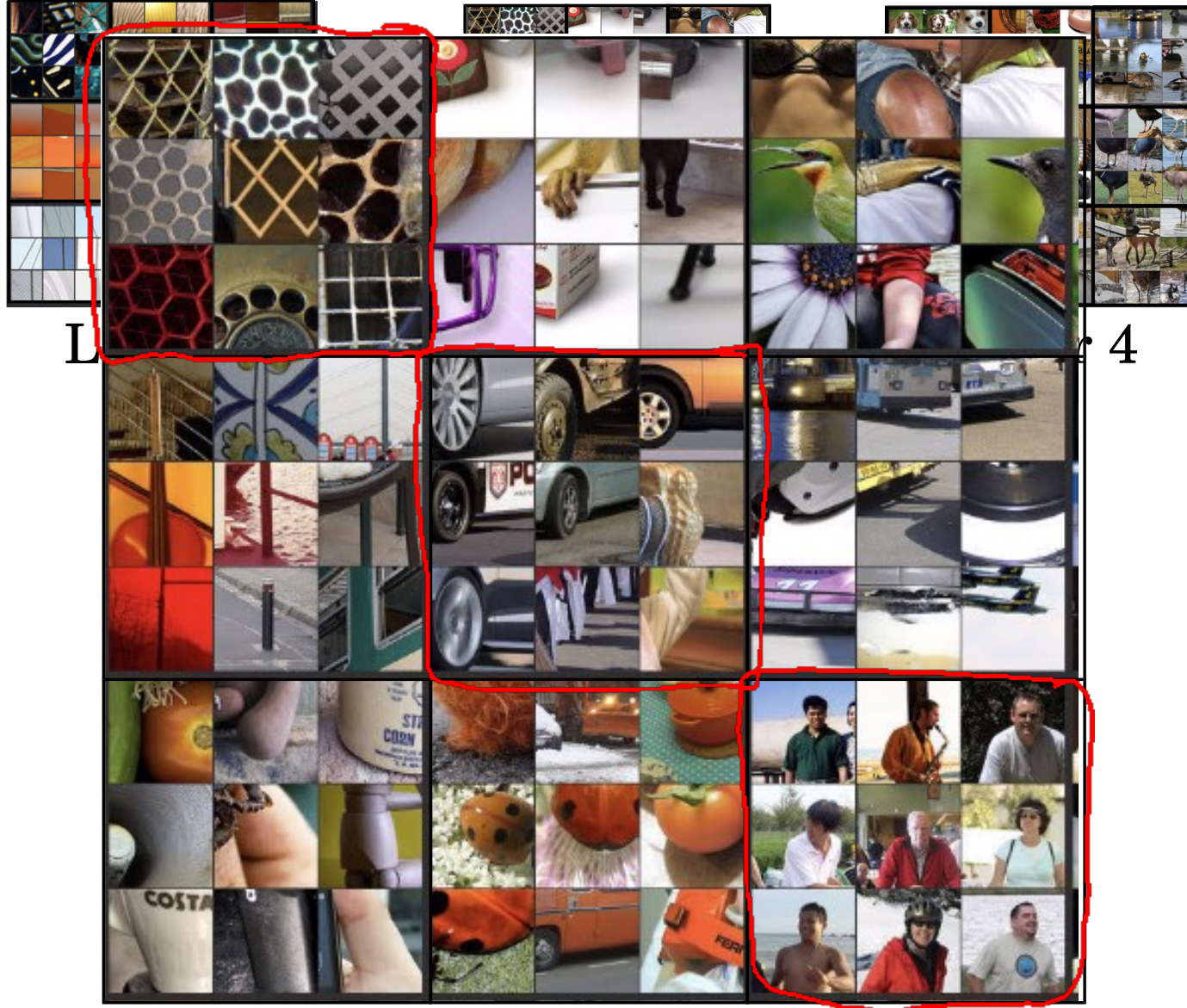
Layer 5



Visualizing deep layers: Layer 3

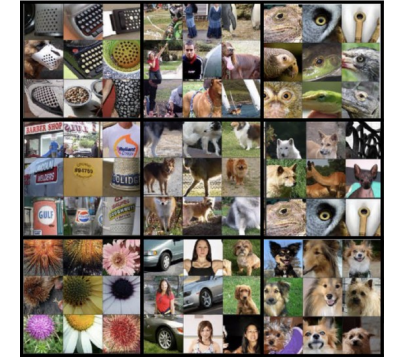


Layer 1



Layer 3

Layer 4

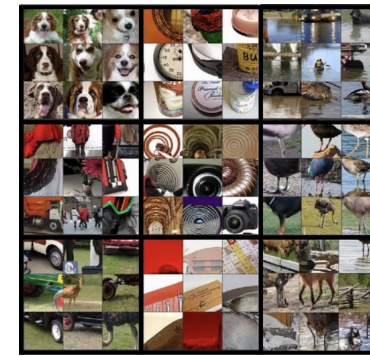


Layer 5

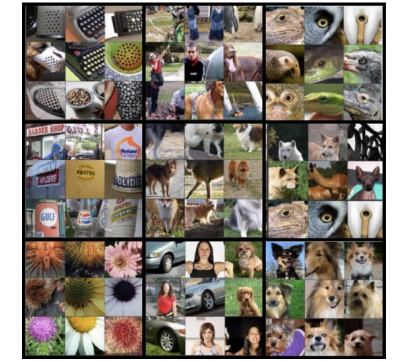
Visualizing deep layers: Layer 4



Layer 4

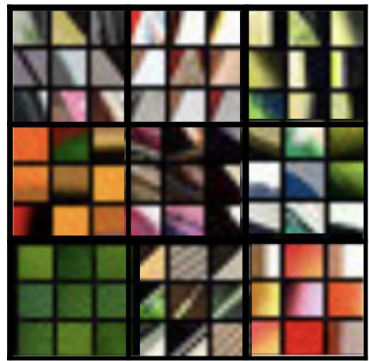


Layer 4

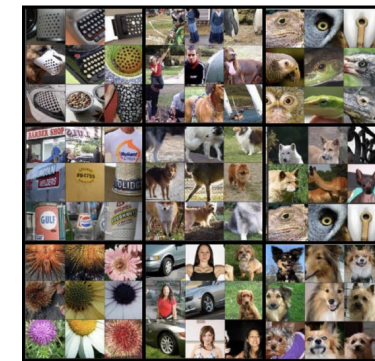
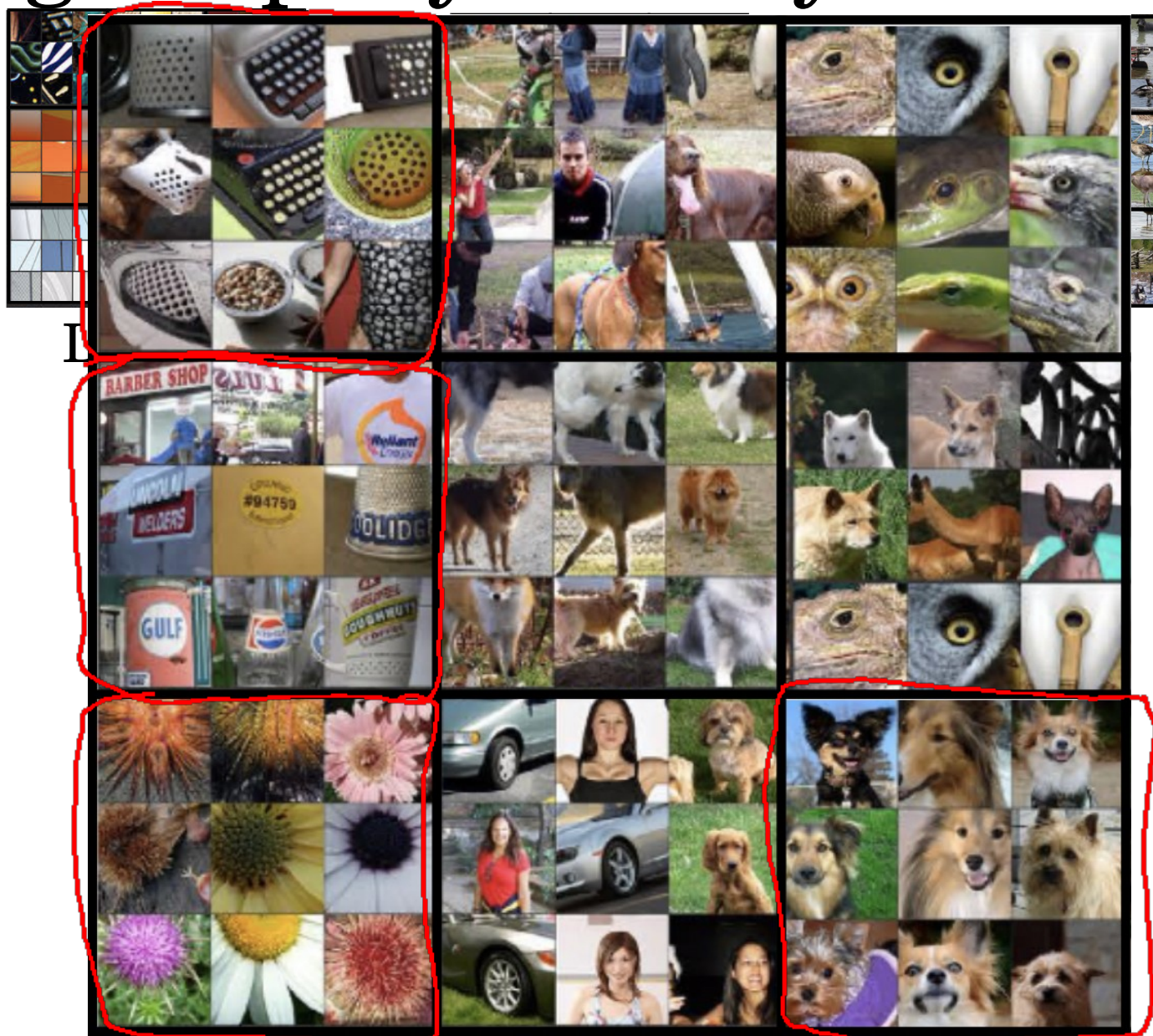


Layer 5

Visualizing deep layers: Layer 5



Layer 1



Layer 5