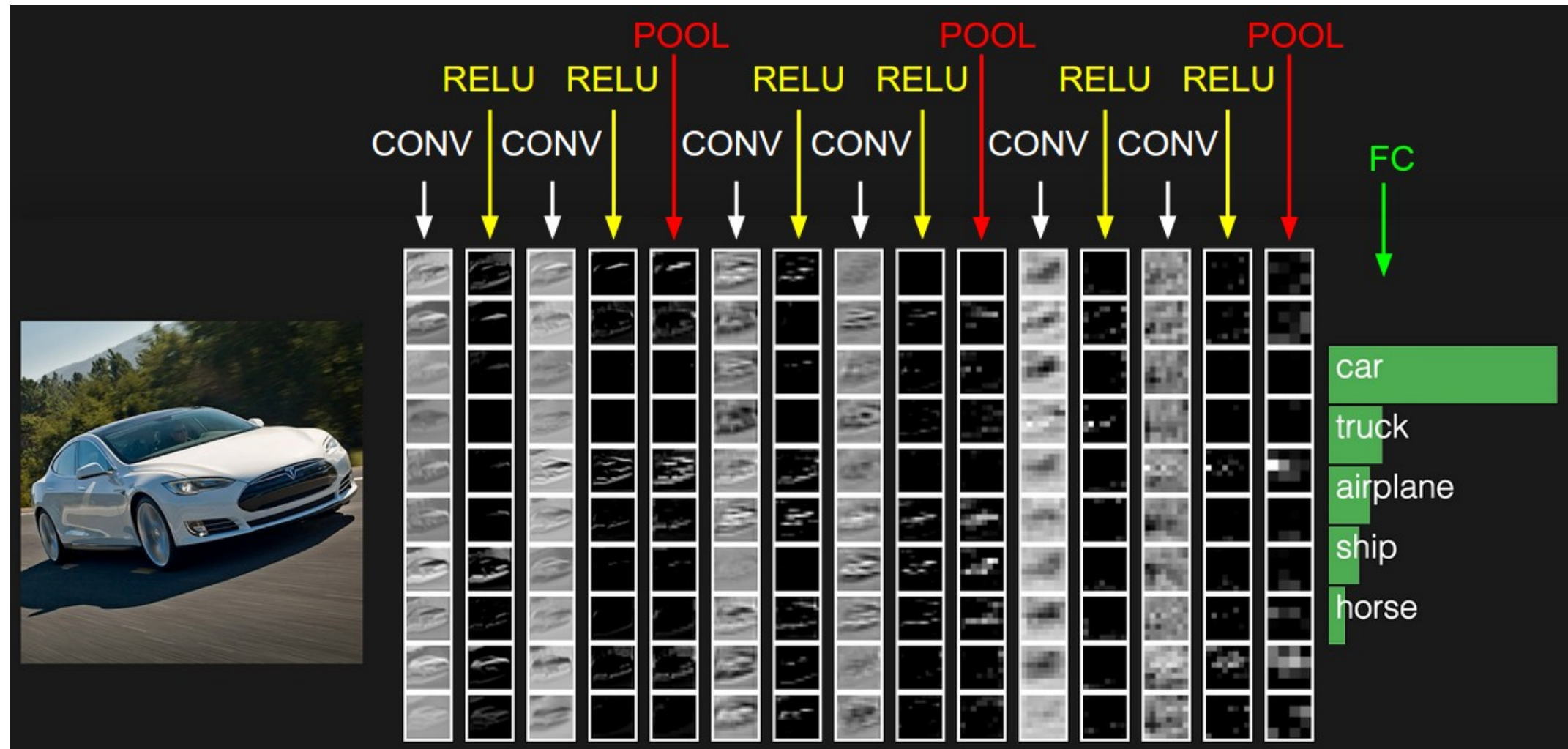
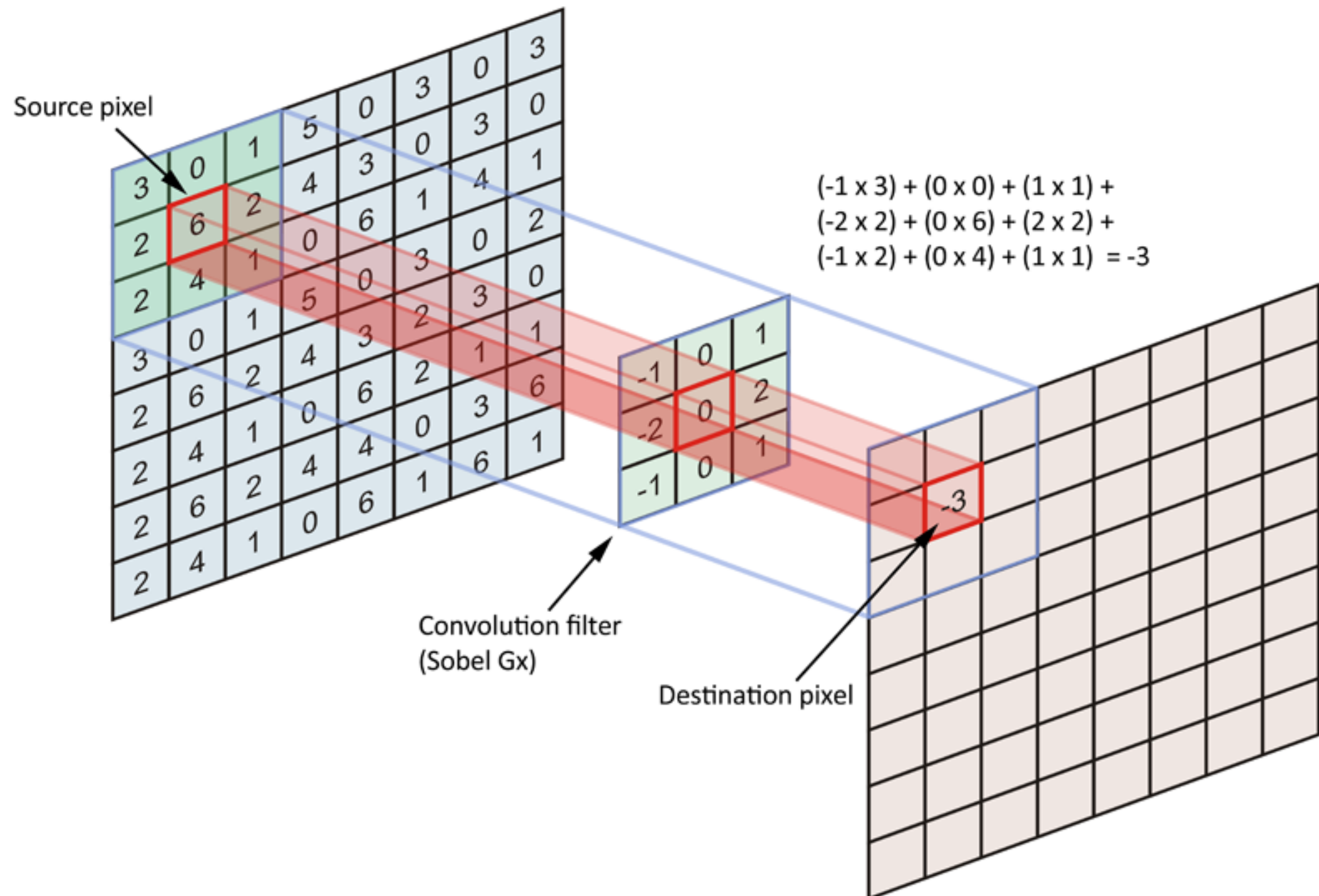


Convolutional Neural Networks

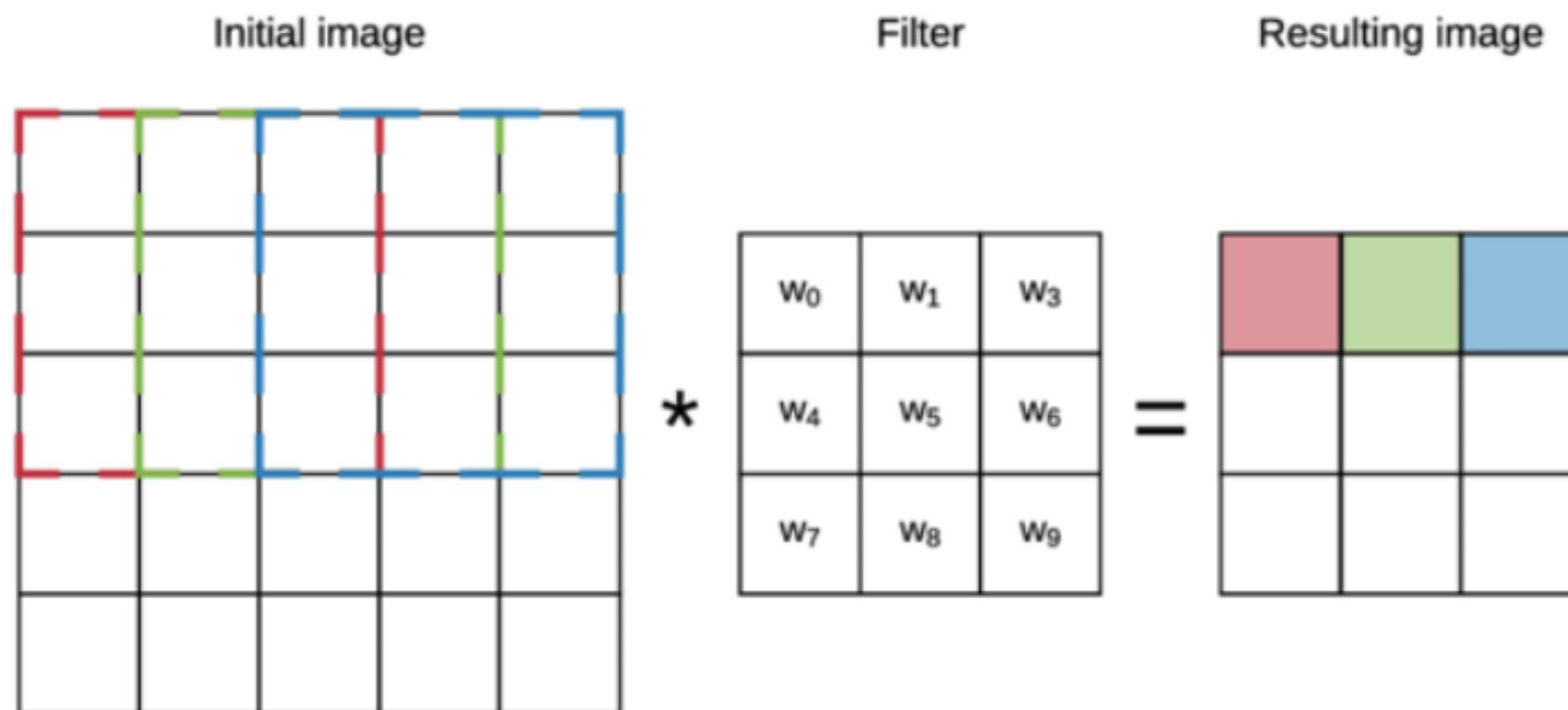
CNN



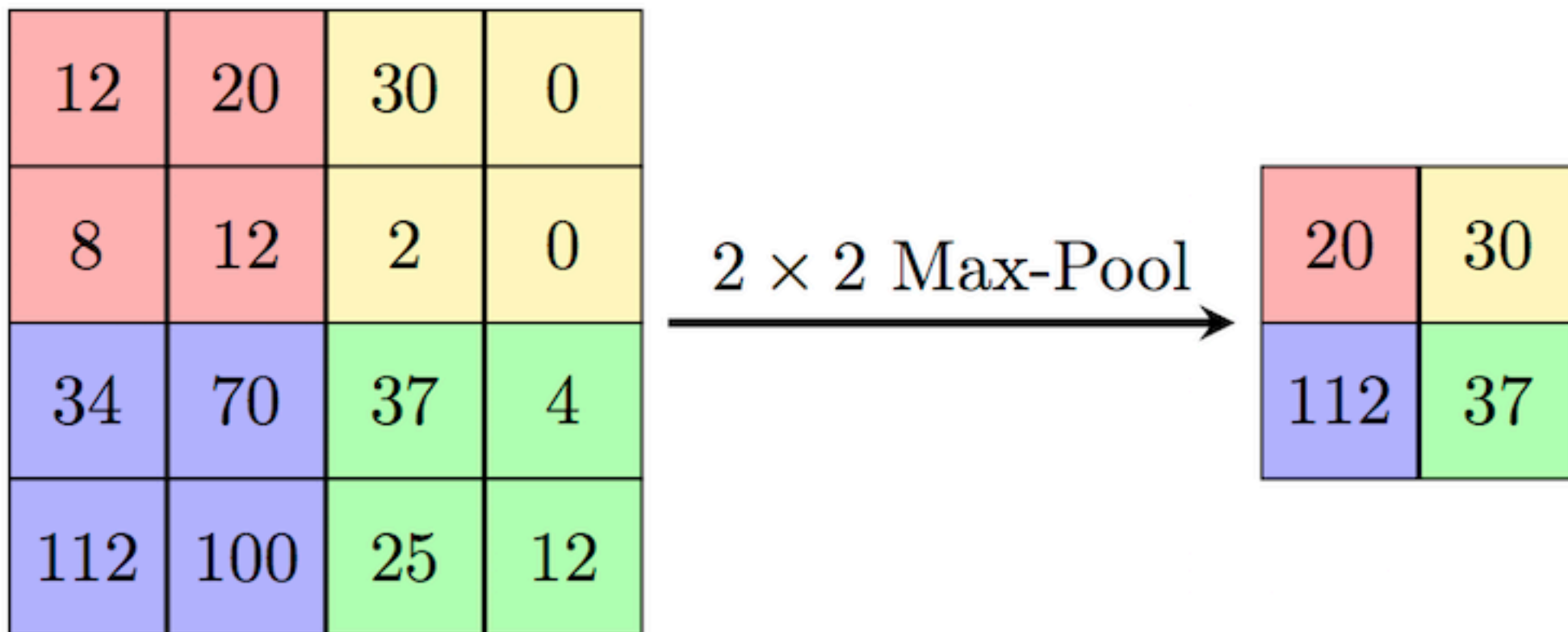
Convolutional Layer



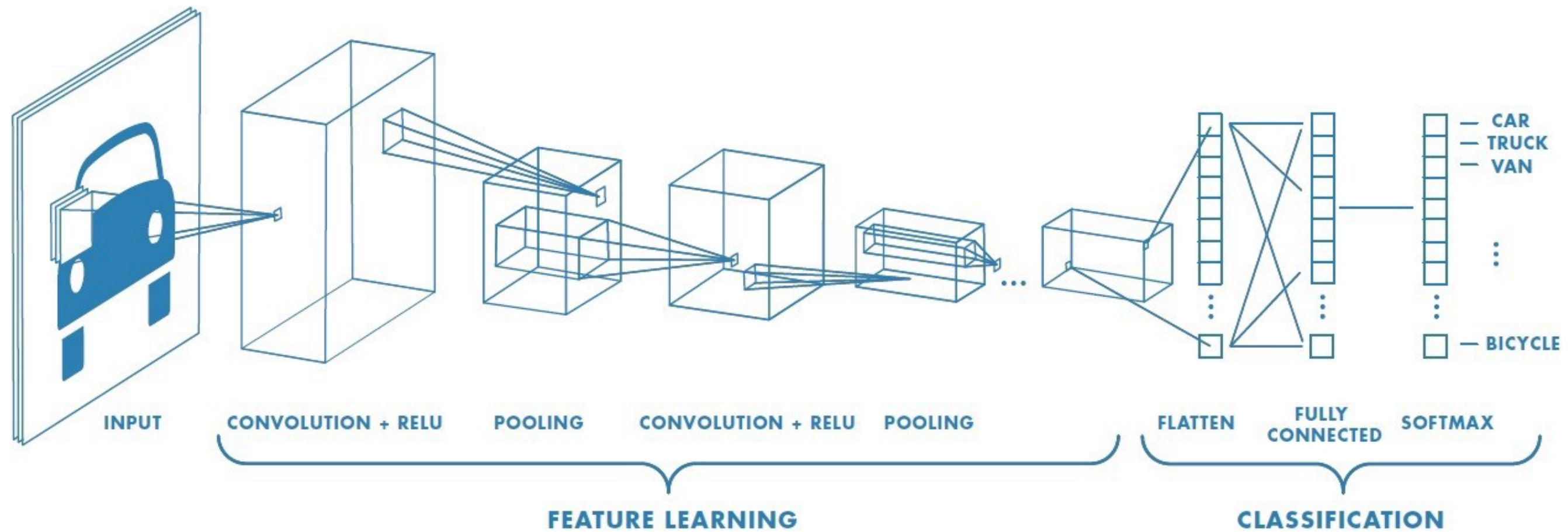
Convolutional Layer



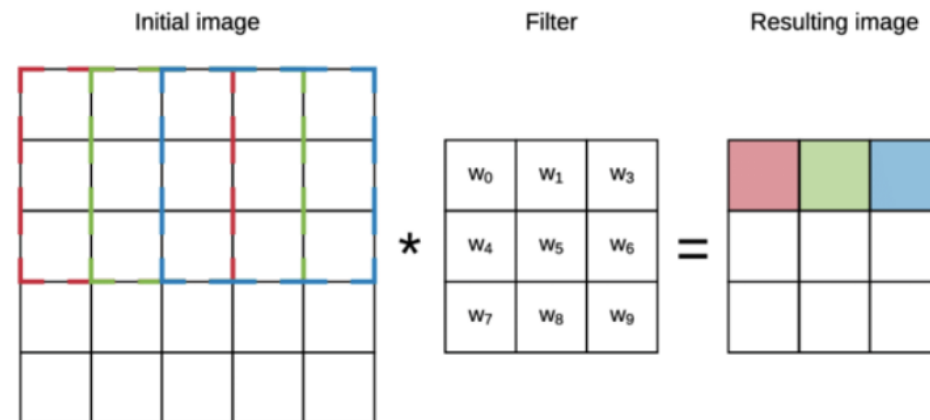
Max Pooling



CNN



Convolutional Layer



$$(W - F + 2P) / S + 1$$

example: 5x5 input, 3x3 filter, padding=0, stride=1

$$\begin{aligned} (5 - 3 + 0) / 1 + 1 &= \\ 2 / 1 + 1 &= 3 \\ \rightarrow 3 \times 3 \end{aligned}$$