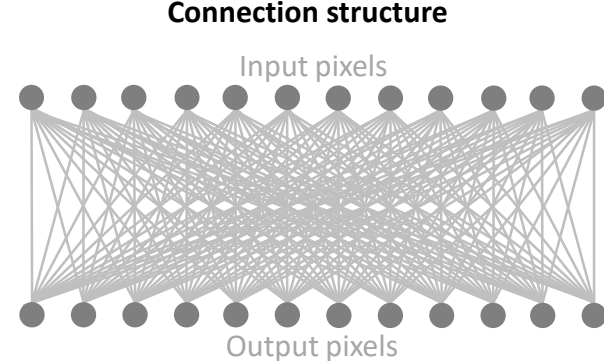
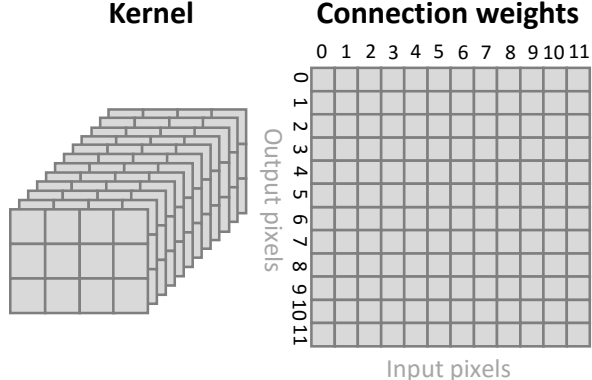


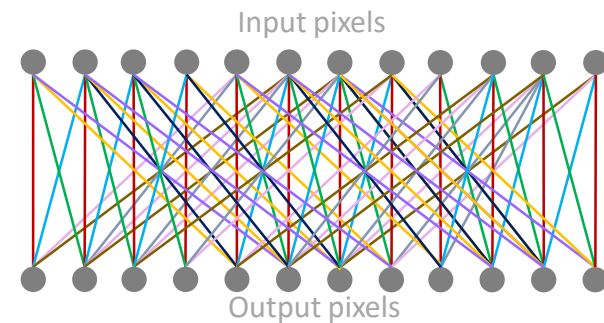
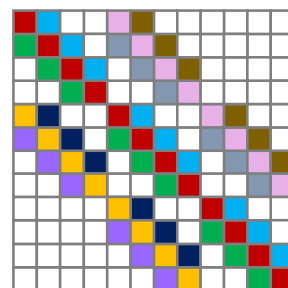
(a) Fully connected layer structure



**Input image**  
(zero-padded 3 x 4 pixels)

|  |   |   |    |    |
|--|---|---|----|----|
|  |   |   |    |    |
|  | 0 | 1 | 2  | 3  |
|  | 4 | 5 | 6  | 7  |
|  | 8 | 9 | 10 | 11 |
|  |   |   |    |    |

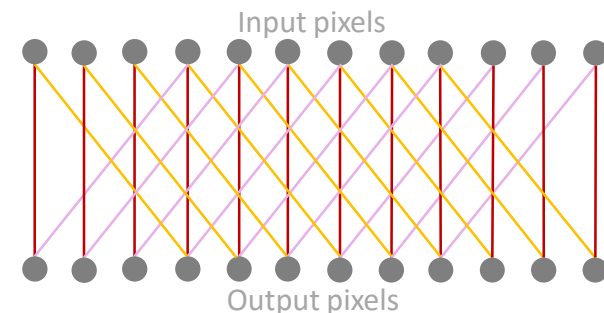
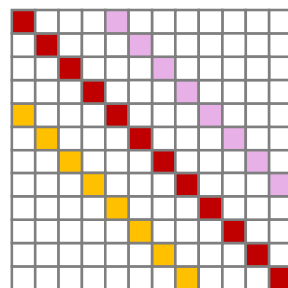
(b) Convolutional  
 $3 \times 3$  square



**Output feature map**  
(4 x 3)

|   |   |    |    |
|---|---|----|----|
| 0 | 1 | 2  | 3  |
| 4 | 5 | 6  | 7  |
| 8 | 9 | 10 | 11 |

(c) Convolutional  
 $1 \times 3$  vertical



(d) Convolutional  
 $3 \times 1$  horizontal

