

手写数字



P

0

1

2

3 10%

4

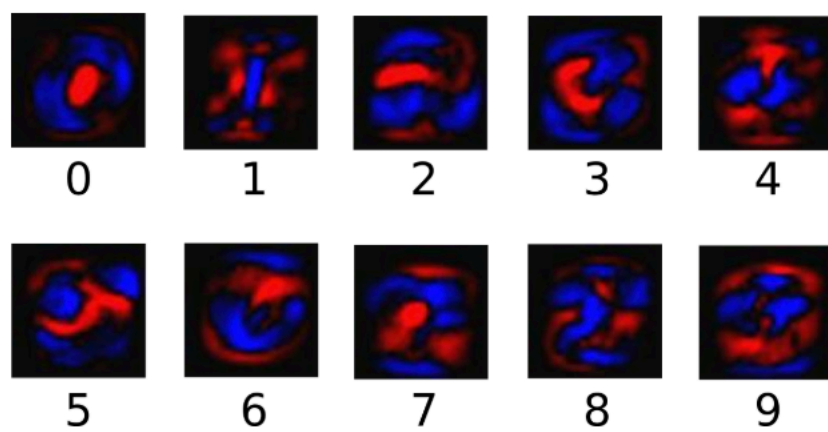
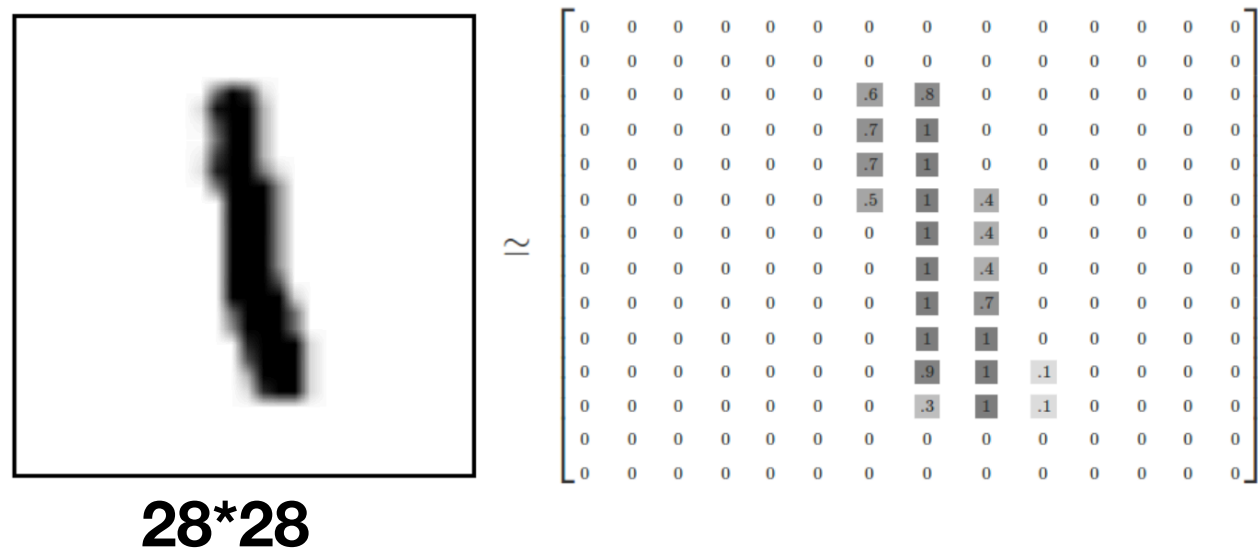
5

6

7

8 80%

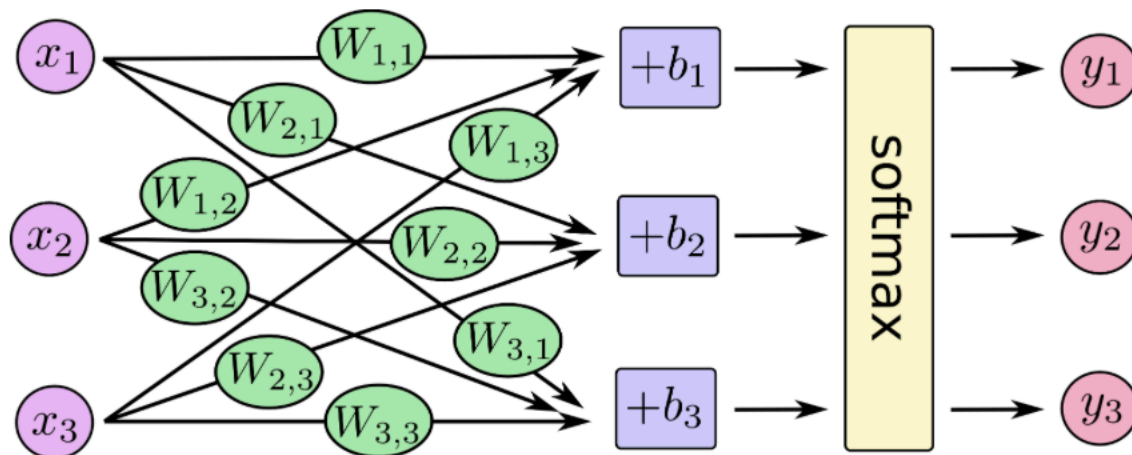
9 10%



$$\text{evidence}_i = \sum_j W_{i,j} x_j + b_i$$

$$y = \text{softmax}(\text{evidence})$$

$$\text{softmax}(x)_i = \frac{\exp(x_i)}{\sum_j \exp(x_j)}$$



$$y = \text{softmax}(Wx + b)$$

成本交叉熵函数

$$H_{y'}(y) = - \sum_i y'_i \log(y_i)$$

```
tf.train.GradientDescentOptimizer
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tf.train.AdagradOptimizer
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tf.train.MomentumOptimizer
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```
tf.train.AdamOptimizer
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```
tf.train.FtrlOptimizer
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```
tf.train.RMSPropOptimizer
```

数学模型



Softmax 概率分布



评估模型 (损失函
数)



优化器

Ref: <http://www.tensorfly.cn>