



$$L_i = -\log\left(\frac{e^{s_{y_i}}}{\sum_j e^{s_j}}\right)$$

unnormalized probabilities

cat
car
frog

3.2

5.1

-1.7

exp

24.5

164.0

0.18

normalize

0.13

0.87

0.00

$$L_i = -\log(0.13) = 0.89$$

unnormalized log probabilities

probabilities