

CSC 4780/6780
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Homework 07 - Softmax

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1 Question

What is the softmax of the vector $[5 \quad 3 \quad 0 \quad -1]$? (Hint: the answer is also a vector.)

2 Answer

The softmax of $[5 \quad 3 \quad 0 \quad -1]$ is $[0.87370431 \quad 0.11824302 \quad 0.00588697 \quad 0.0021657]$ by following the formula:

$$\sigma(z_i) = \frac{e^{z_i}}{\sum_{j=1}^K e^{z_j}} \quad \text{for } i = 1, 2, \dots, K$$