

Temperature scaling

Temperature Scaling $\left[\frac{p_i^{1/T}}{\sum_j p_j^{1/T}} \right]$

for $T = 0.5$, $[0.6, 0.3, 0.1] \mapsto [0.78, 0.2, 0.02]$

$$0.6^{1/0.5} = 0.36 \mid \sum p_j^{1/0.5} = 0.78$$

$$0.3^{1/0.5} = 0.09 \mid \sum p_j^{1/0.5} = 0.20$$

$$0.1^{1/0.5} = 0.01 \mid \sum p_j^{1/0.5} = 0.02$$

for $T = 2$, $[0.6, 0.3, 0.1] \mapsto [0.48, 0.32, 0.2]$

$$0.6^{1/2} = 0.77 \mid \sum p_j^{1/2} = 0.48$$

$$0.3^{1/2} = 0.55 \mid \sum p_j^{1/2} = 0.32$$

$$0.1^{1/2} = 0.32 \mid \sum p_j^{1/2} = 0.2$$