The online Bayes Algorithm

Total loss of expert i

$$L_i^t = -\sum_{s=1}^t \log p_i^s(c^s); \quad L_i^0 = 0$$

Weight of expert i

$$w_i^t = w_i^1 e^{-L_i^{t-1}} = w_i^1 \prod_{c=1}^{t-1} p_i^s(c^s)$$