

it reduces the model's training error. The update rule for weight w was

$$\begin{aligned}v_{i+1} &:= 0.9 \cdot v_i - 0.0005 \cdot \epsilon \cdot w_i - \epsilon \cdot \left\langle \frac{\partial L}{\partial w} \Big|_{w_i} \right\rangle_{D_i} \\w_{i+1} &:= w_i + v_{i+1}\end{aligned}$$