PadhAI: 6 Jars of Sigmoid Neuron

One Fourth Labs

The math-free version of the learning algorithm

What does the algorithm look like now

1. The learning algorithm
   a. **Initialise:** w, b
   b. **Iterate over data**
      i. Compute $\hat{y}$
      ii. Compute Loss(w,b)
      iii. $w_{t+1} = w_t + \eta \Delta w_t$
      iv. $b_{t+1} = b_t + \eta \Delta b_t$
   c. **Till satisfied**
2. Where
   a. model: $\hat{y} = 1/(1 + \exp(-(wx + b))$
   b. Loss(w,b) = $\Sigma_i (y_i - \hat{y}_i)^2$
   c. Δw and Δb are the partial derivatives of Loss(w,b) with respect to w and b respectively.
3. Frameworks like Pytorch and Tensorflow can automatically implement the learning algorithm and return the ideal values of parameters w and b