Back Propagation in (Artificial) Neural Networks (NN)

Saehwa Kim

Information and Communications Engineering Hankuk University of Foreign Studies

Reverse Automatic Differentiation (autodiff)

- ~= Back-Propagation
- ~= "tape"
 - ▶ The data structure for storing the intermediate variable w_i

(Ex)
$$L = \mathcal{L} \circ f \circ g \circ h(\omega)$$

= $\mathcal{L}(f(g(h(\omega))))$

$$8a = \frac{dL}{da}$$



Reverse Automatic Differentiation

