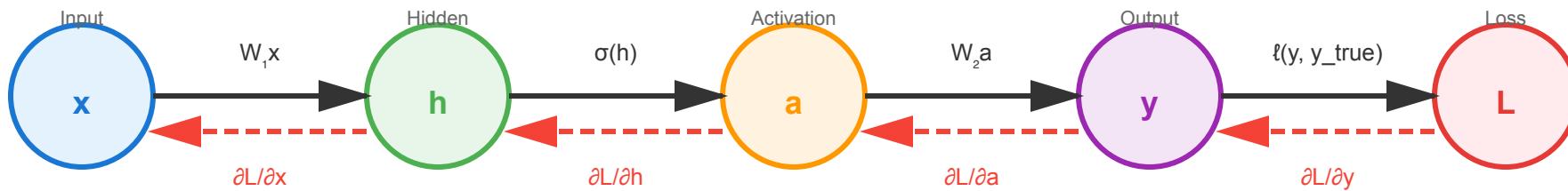


Backpropagation Computational Graph

Forward Pass →



Complexity

$O(n)$ for n operations

Chain Rule Application

$$\partial L / \partial W_1 = \partial L / \partial h \times \partial h / \partial W_1$$

Key Insight

Each edge traversed exactly once

← Backward Pass (Backpropagation)

Forward pass computes outputs; backward pass computes gradients using chain rule