Part 1/3:

Initialization Strategies

1. Why is Initialization Important?

2. Problems with Zero Initialization

3. Random Initialization and Breaking Symmetry

4. Gradient Vanishing/Exploding

5. Xavier/Glorot Initialization

6. He Initialization (for ReLU)

7. LSUV Initialization

8. Leveraging Pre-trained Weights

9. Comparison of Initialization Strategies