

weight initialization techniques

Assignment Questions



1. What is the vanishing gradient problem in deep neural networks? How does it affect training?
2. Explain how Xavier initialization addresses the vanishing gradient problem.
3. What are some common activation functions that are prone to causing vanishing gradients?
4. Define the exploding gradient problem in deep neural networks. How does it impact training?
5. What is the role of proper weight initialization in training deep neural networks?
6. Explain the concept of batch normalization and its impact on weight initialization techniques.
7. Implement He initialization in Python using TensorFlow or PyTorch.