

Question:

Why does increasing model complexity in TensorFlow sometimes **reduce** real-world performance instead of improving it?

Focus concepts: Overfitting, generalization, validation misuse

Question:

How does improper **data normalization or scaling** affect gradient descent behavior in TensorFlow models?

Focus concepts: Convergence speed, unstable gradients, optimization

Question:

Why can two TensorFlow models with identical architecture and data converge to **different solutions**?

Focus concepts: Weight initialization, non-convex loss surface, identifiability

Question:

In what situations would **momentum-based optimization** fail to improve learning in TensorFlow?

Focus concepts: Saddle points, noisy gradients, overshooting

Question:

Why is it risky to judge a TensorFlow model's quality based only on **training loss**?

Focus concepts: Validation, bias–variance tradeoff, deployment issues