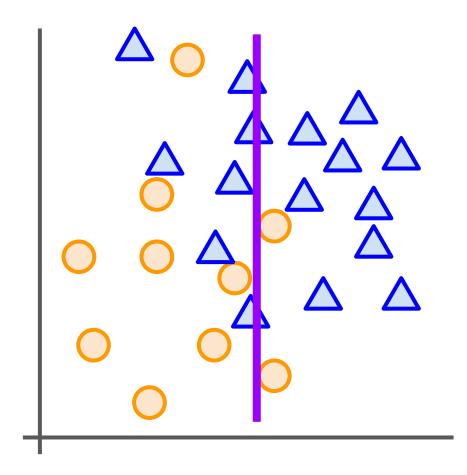
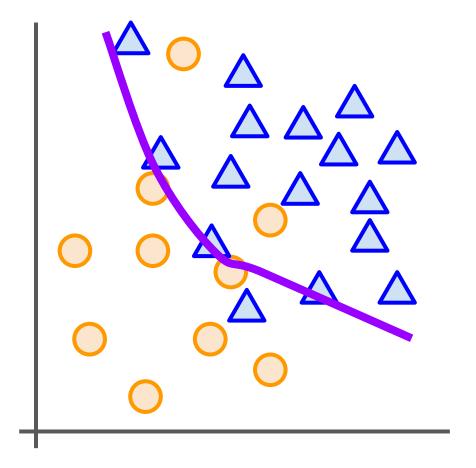
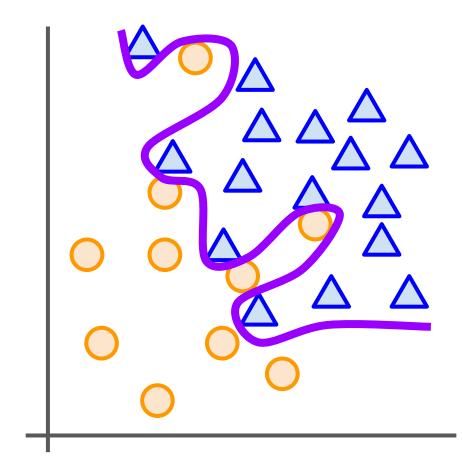
Underfitting vs. Overfitting





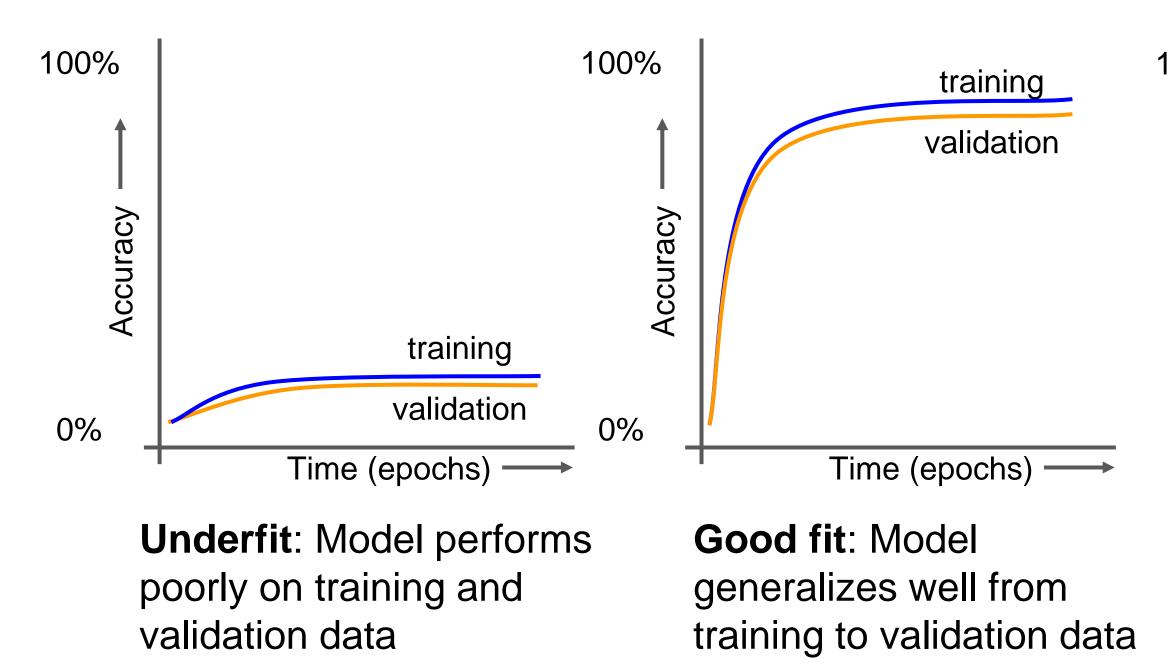
Underfit: Model fails to capture trends in the data

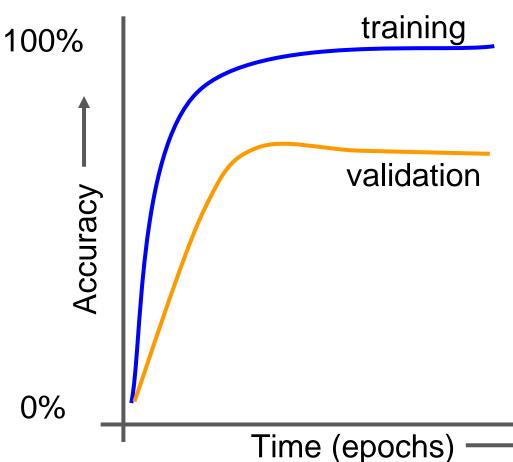
Good fit: Model captures trends and can generalize to unseen data



Overfit: Model captures training data trends but fails on unseen data

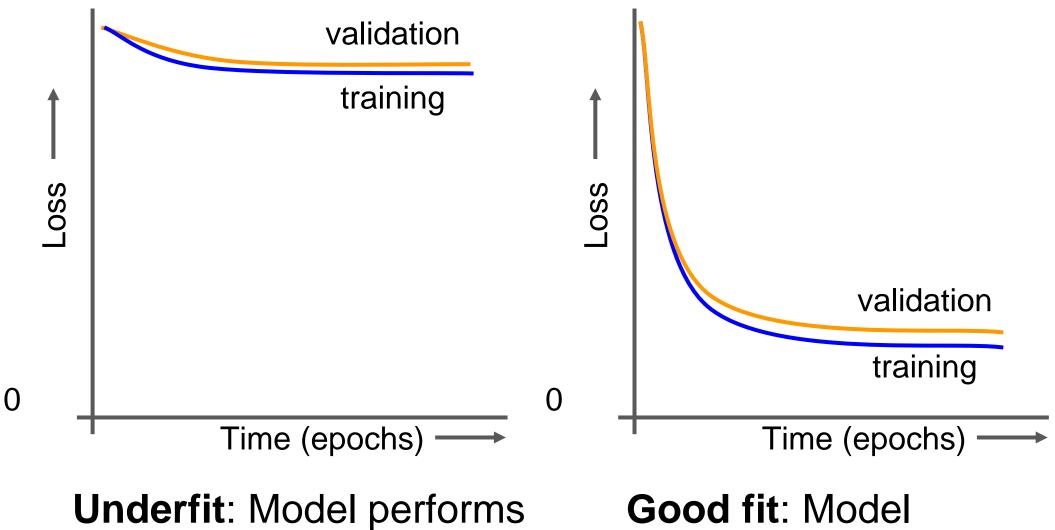
Spotting Underfitting and Overfitting





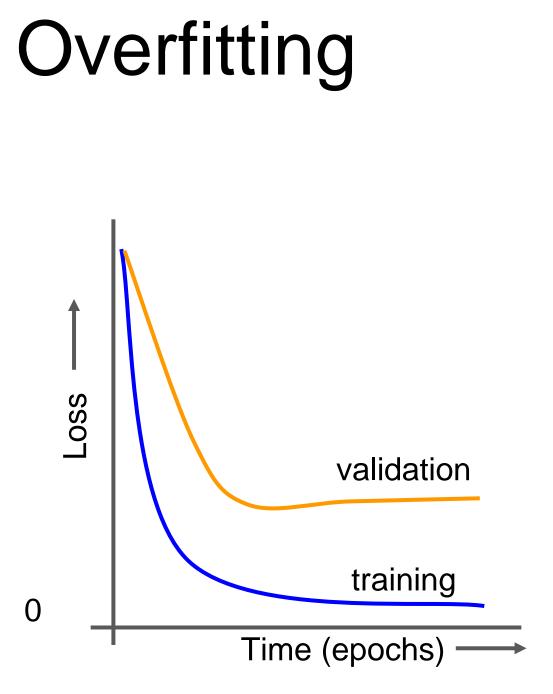
Overfit: Model predicts training data well but fails to generalize to validation data

Spotting Underfitting and Overfitting



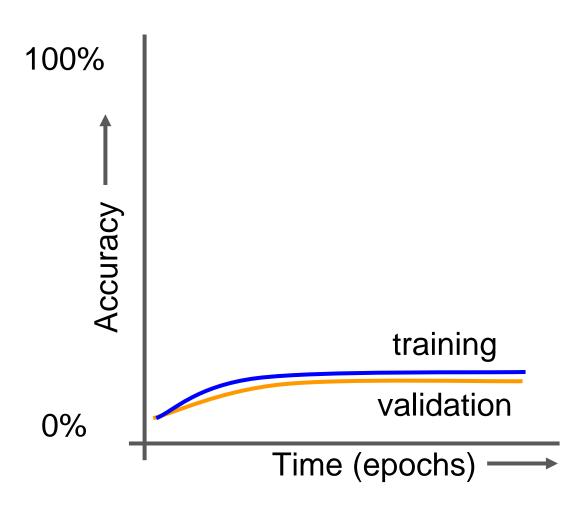
Underfit: Model performs poorly on training and validation data

Good fit: Model generalizes well from training to validation data



Overfit: Model predicts training data well but fails to generalize to validation data

Fixing Underfitting



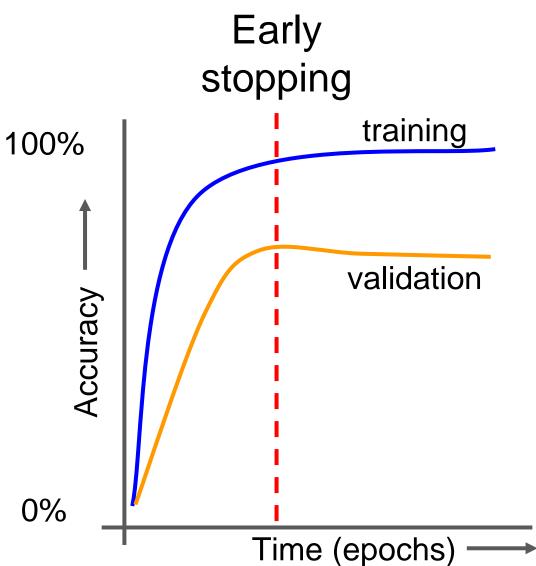
Underfit: Model performs poorly on training and validation data

- Get more data
- Try different features or more features
- Train for longer
- nodes, etc.)

• Try a more complex model (more layers, more

Fixing Overfitting

- Get more data
- Early stopping
- Reduce model complexity
- Add regularization terms
- Add dropout layers (for neural networks)



Overfit: Model predicts training data well but fails to generalize to validation data