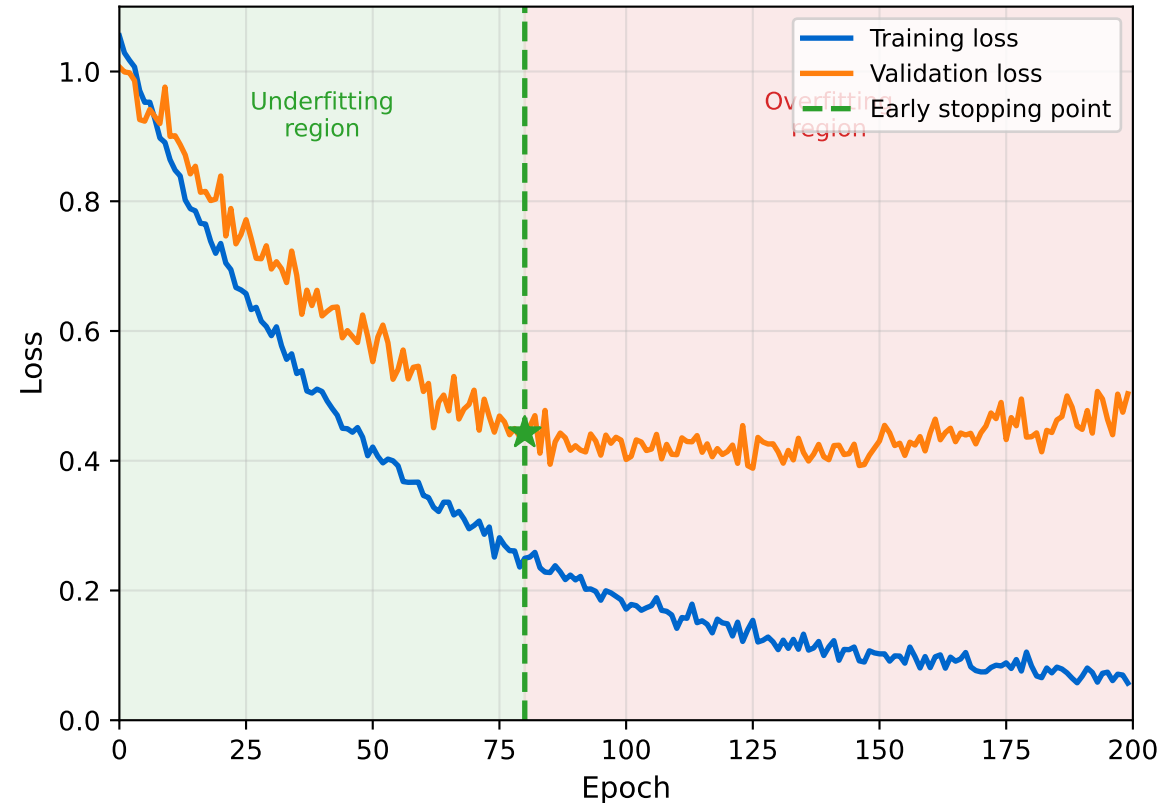


# Early Stopping: Simple and Effective Regularization

## Early Stopping: Stop Before Overfitting



## Early Stopping Algorithm

1. Split data into train and validation sets
2. Train model, computing validation loss each epoch
3. Keep track of best validation loss seen so far
4. If validation loss hasn't improved for 'patience' epochs, STOP training
5. Restore

Hyperparameters:

- patience: epochs to wait (typically 5-20)
- min\_delta: minimum improvement threshold

*Early stopping is a form of regularization:  
it limits model complexity by limiting training time*