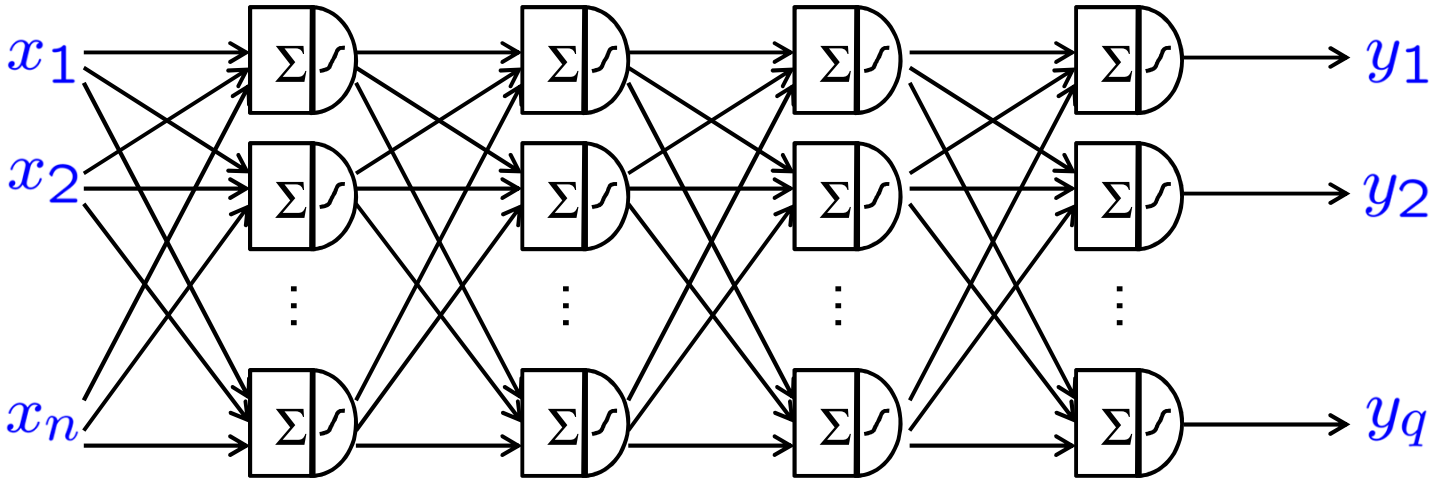
Slide 41

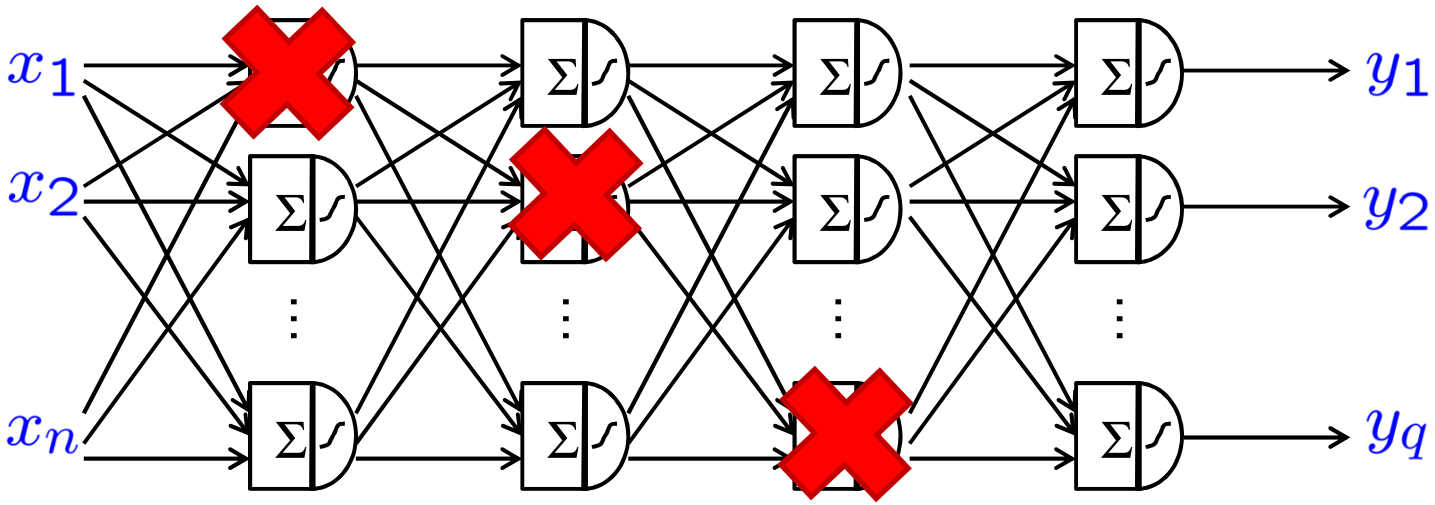
Dropout

- regularization by randomly switching off perceptrons during training



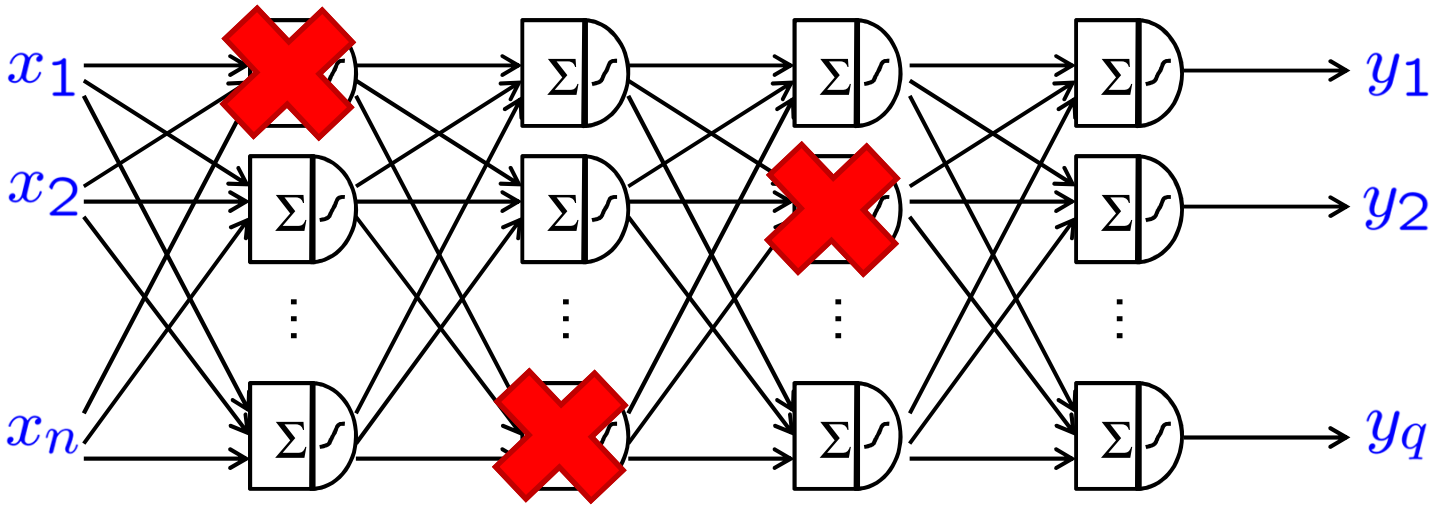
Dropout

- regularization by randomly switching off perceptrons during training



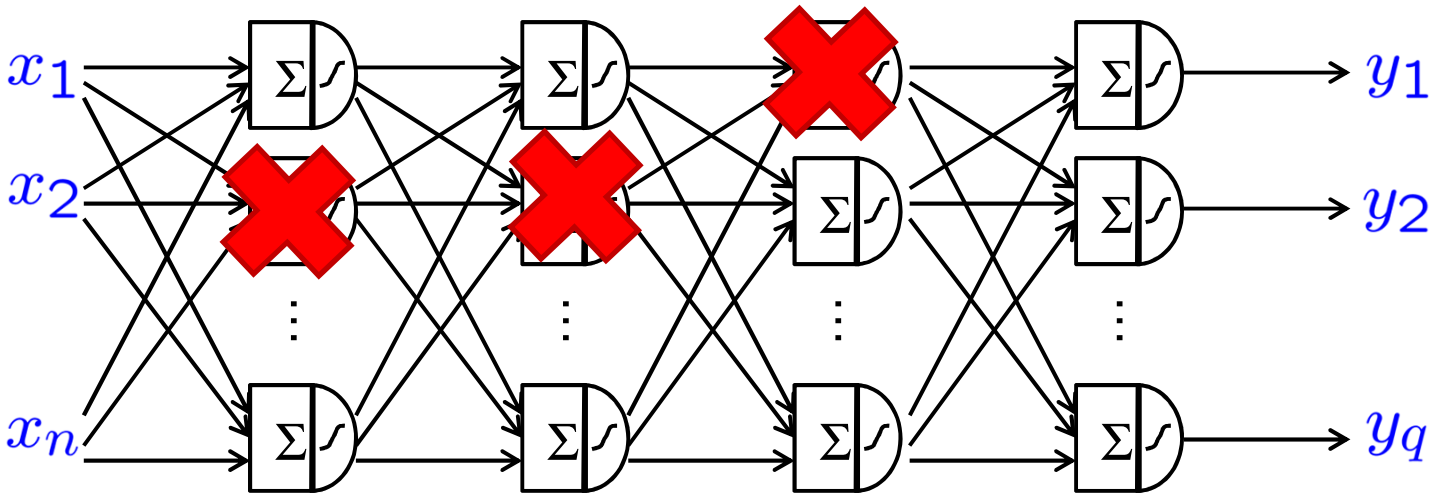
Dropout

- regularization by randomly switching off perceptrons during training



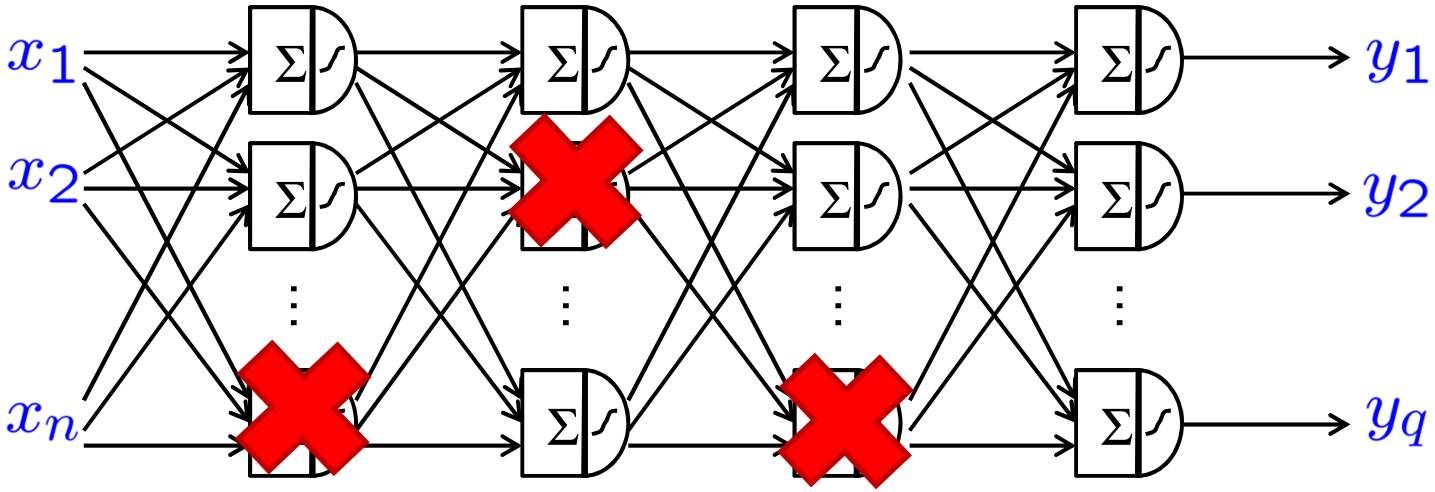
Dropout

- regularization by randomly switching off perceptrons during training



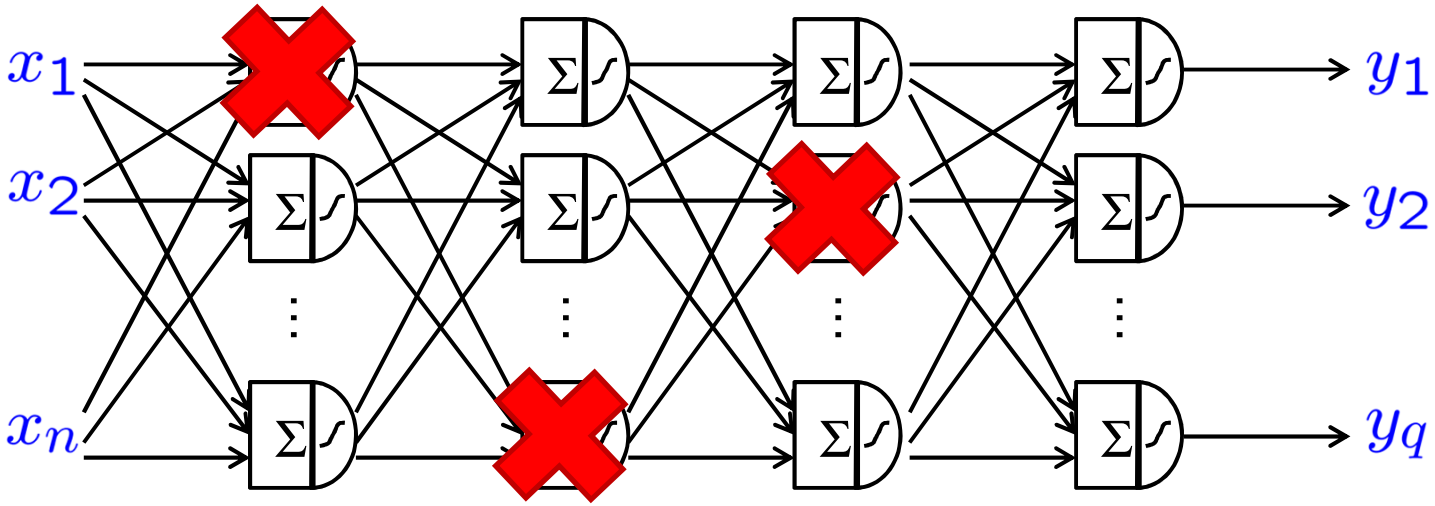
Dropout

- regularization by randomly switching off perceptrons during training



Dropout

- regularization by randomly switching off perceptrons during training

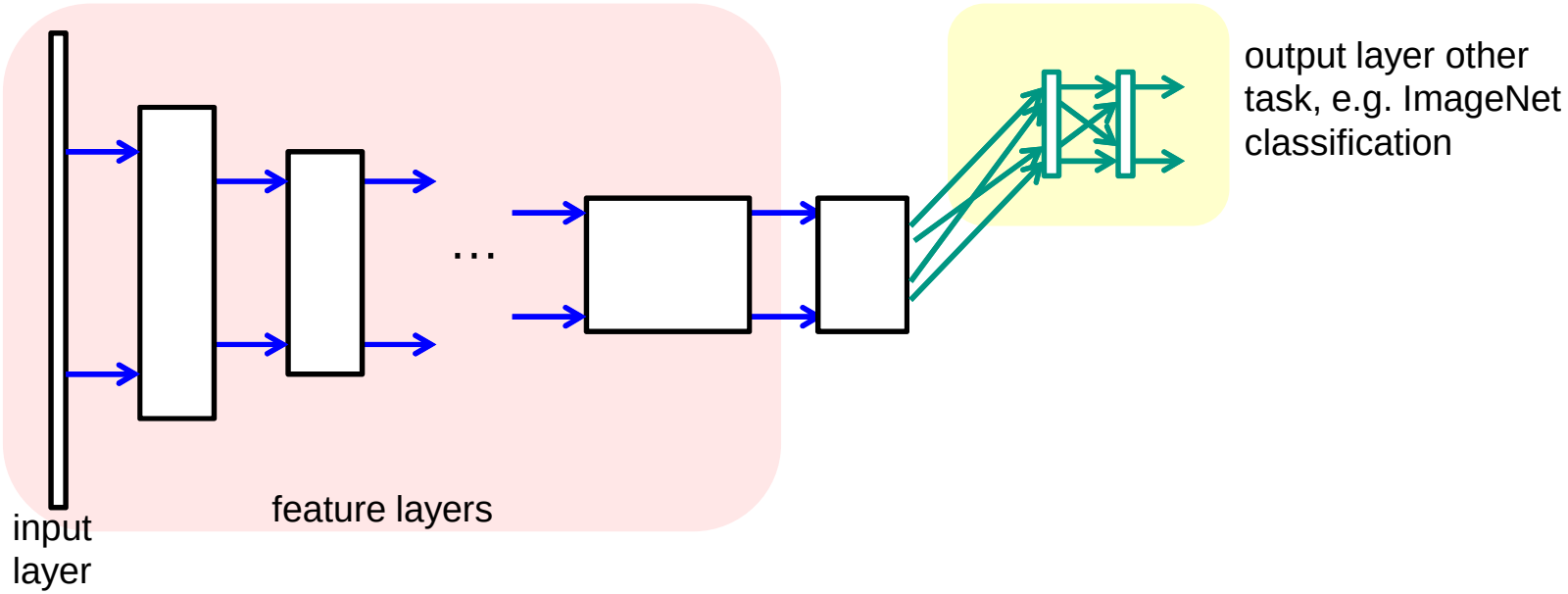


- dropout forces the neural network to store relevant information in a distributed way
- dropout reduces overfitting

Slide 45

Usage of Pre-Trained Feature Networks

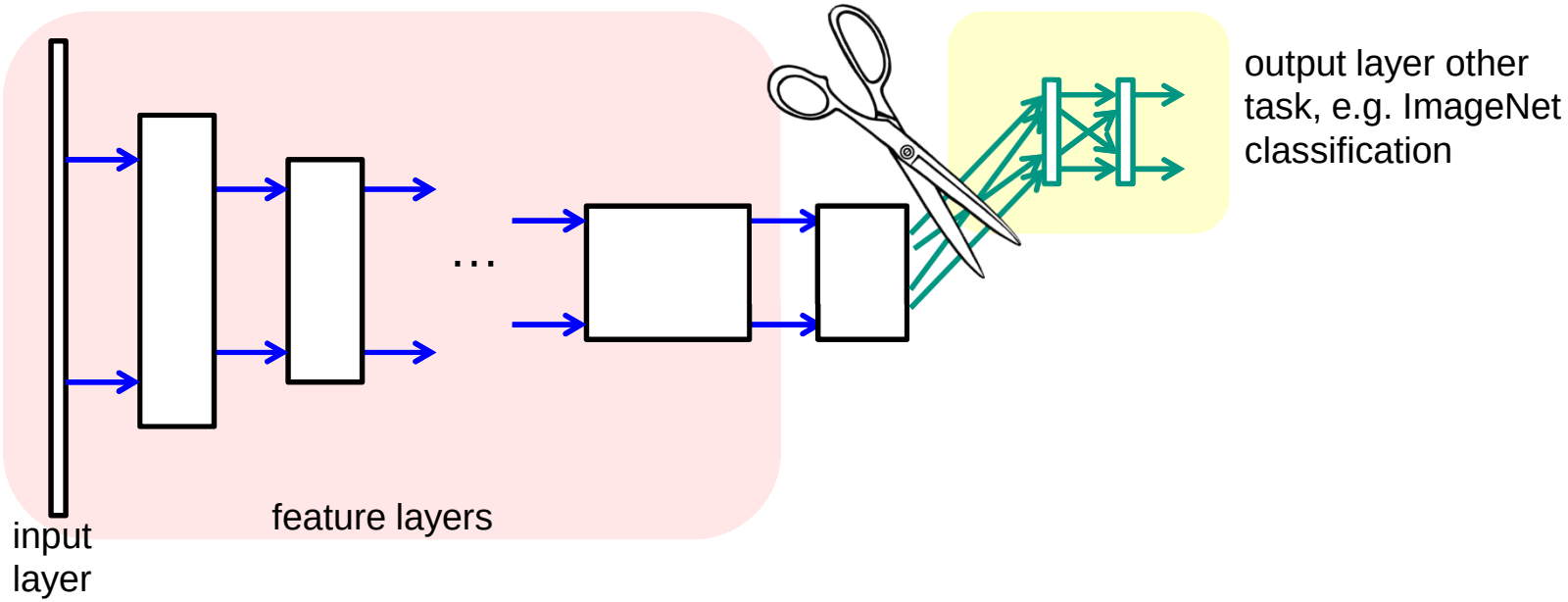
- idea: reuse pre-trained network



1. train other task with large training set

Usage of Pre-Trained Feature Networks

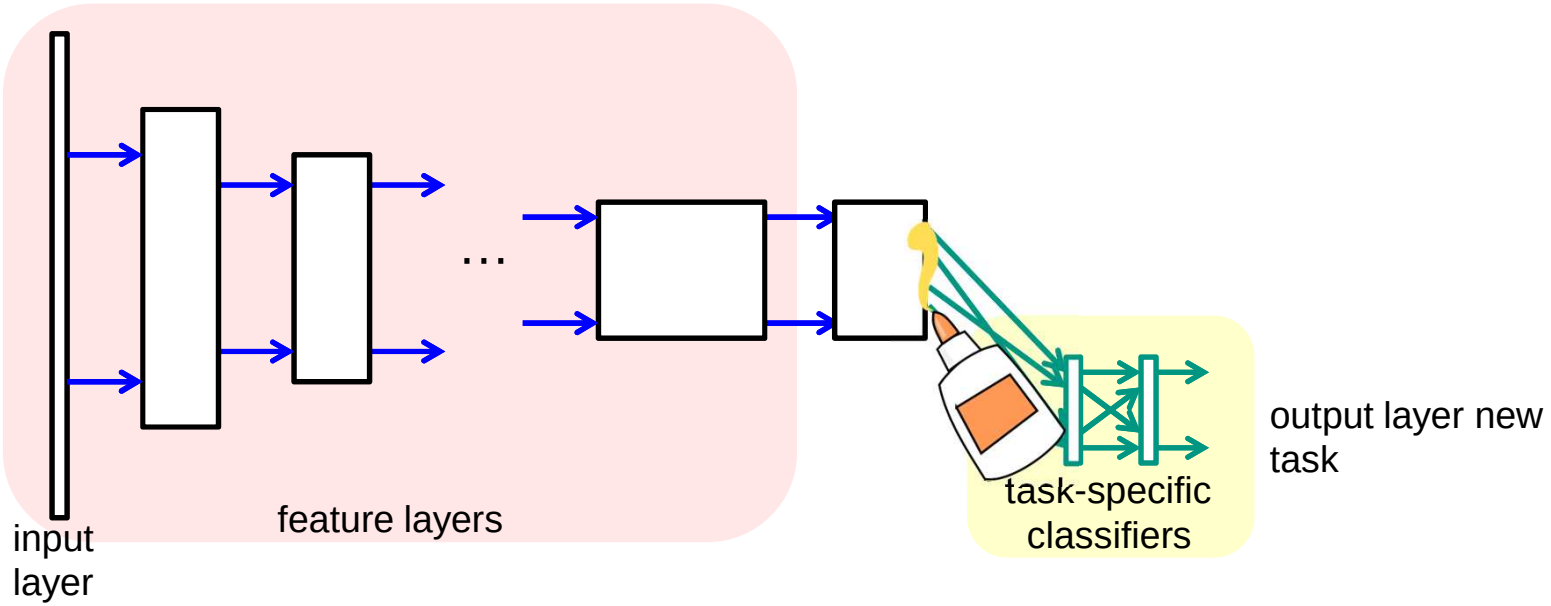
- idea: reuse pre-trained network



1. train other task with large training set
2. throw away classification layers of other task

Usage of Pre-Trained Feature Networks

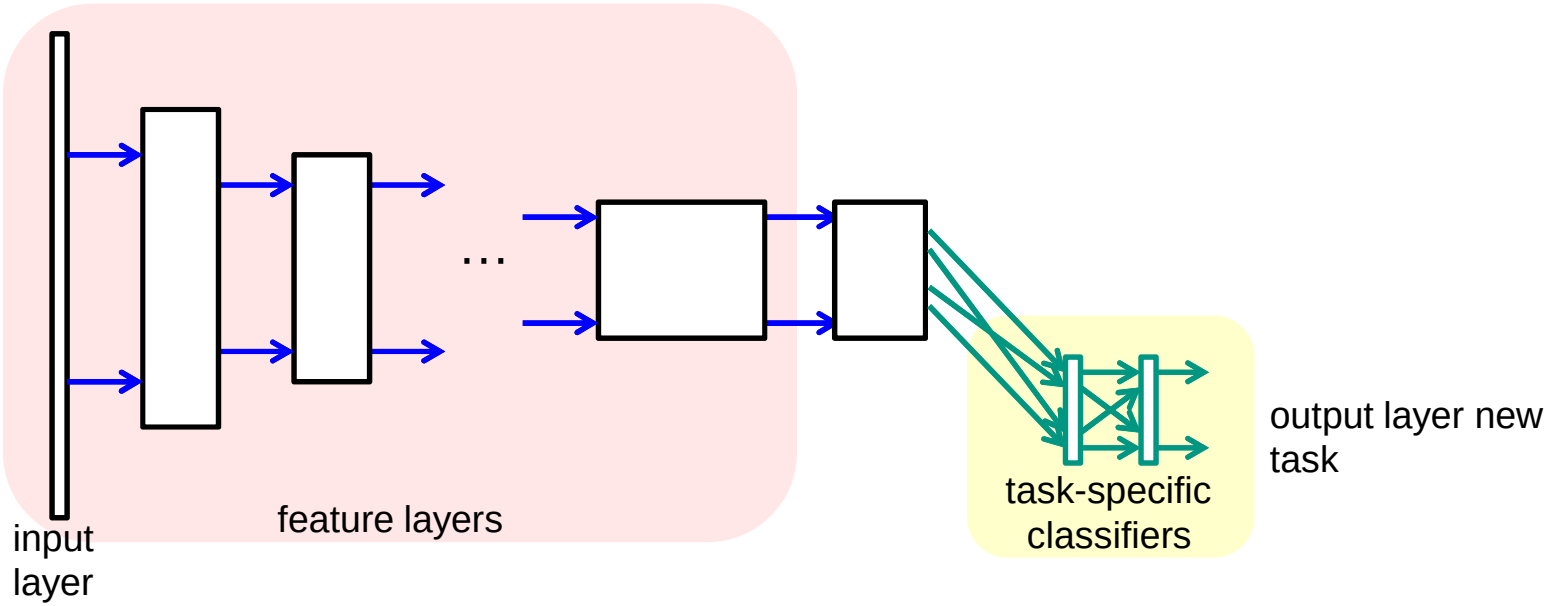
- idea: reuse pre-trained network



1. train other task with large training set
2. throw away classification layers of other task
3. create new classification layers for new task

Usage of Pre-Trained Feature Networks

- idea: reuse pre-trained network



1. train other task with large training set
2. throw away classification layers of other task
3. create new classification layers for new task
4. train weights of new classification layer while preserving feature layers