Proventing Overfitting

- · a model so tuned to the specifics of the training data that it is unable to generalize to new example
- · Data augmentation
 - · artificial boosting the diversity and number of training examples by performing random transformations to existing images to create a set of new variants
 - ·Useful when the original training data set is small
- Dropout Registration
- · Randomly removing units from the neural network during a training gradient step

Leveraging Pretained Models

- Retrieving Intermediate representations prodced by the pretrained model, and then feeding these representations into a new model as input
- · fine tune weight prameters applied to the extracted features