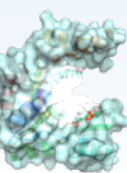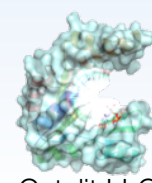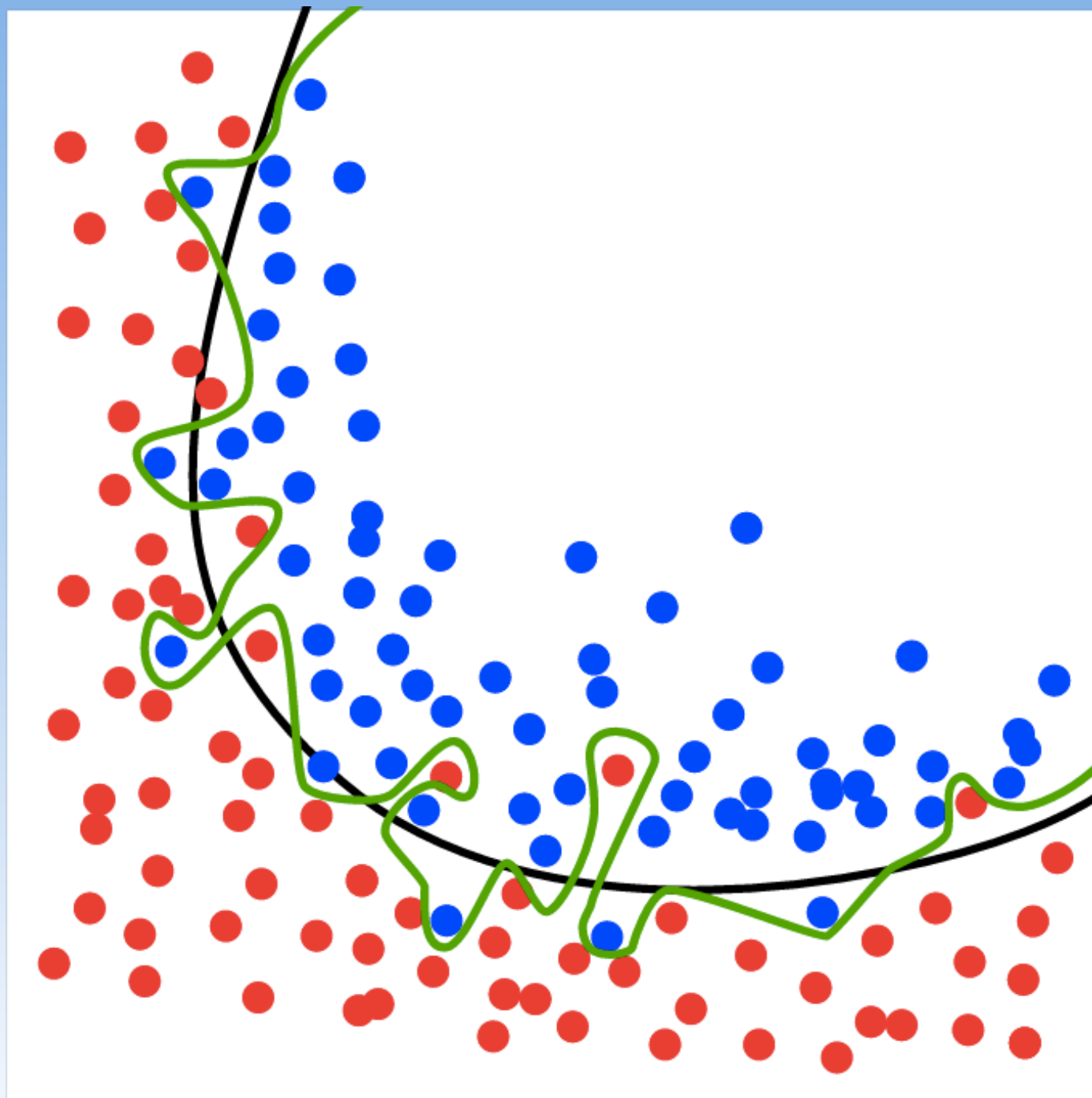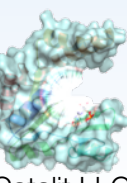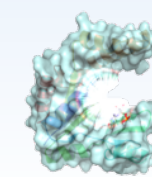# OVERFITTING AND REGULARIZATION

OVERFITTING

WHY IS OVERFITTING A PROBLEM?

MORE DATA
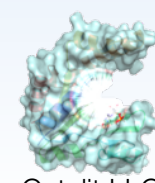
WEIGHT REGULARIZATION

New loss = old loss + penalty for large weights

DATA AUGMENTATION
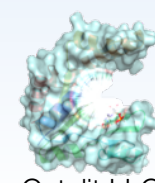

Is there a cat?

YES

DATA AUGMENTATION

Is there a cat?

YES

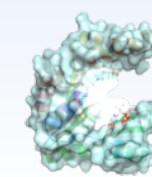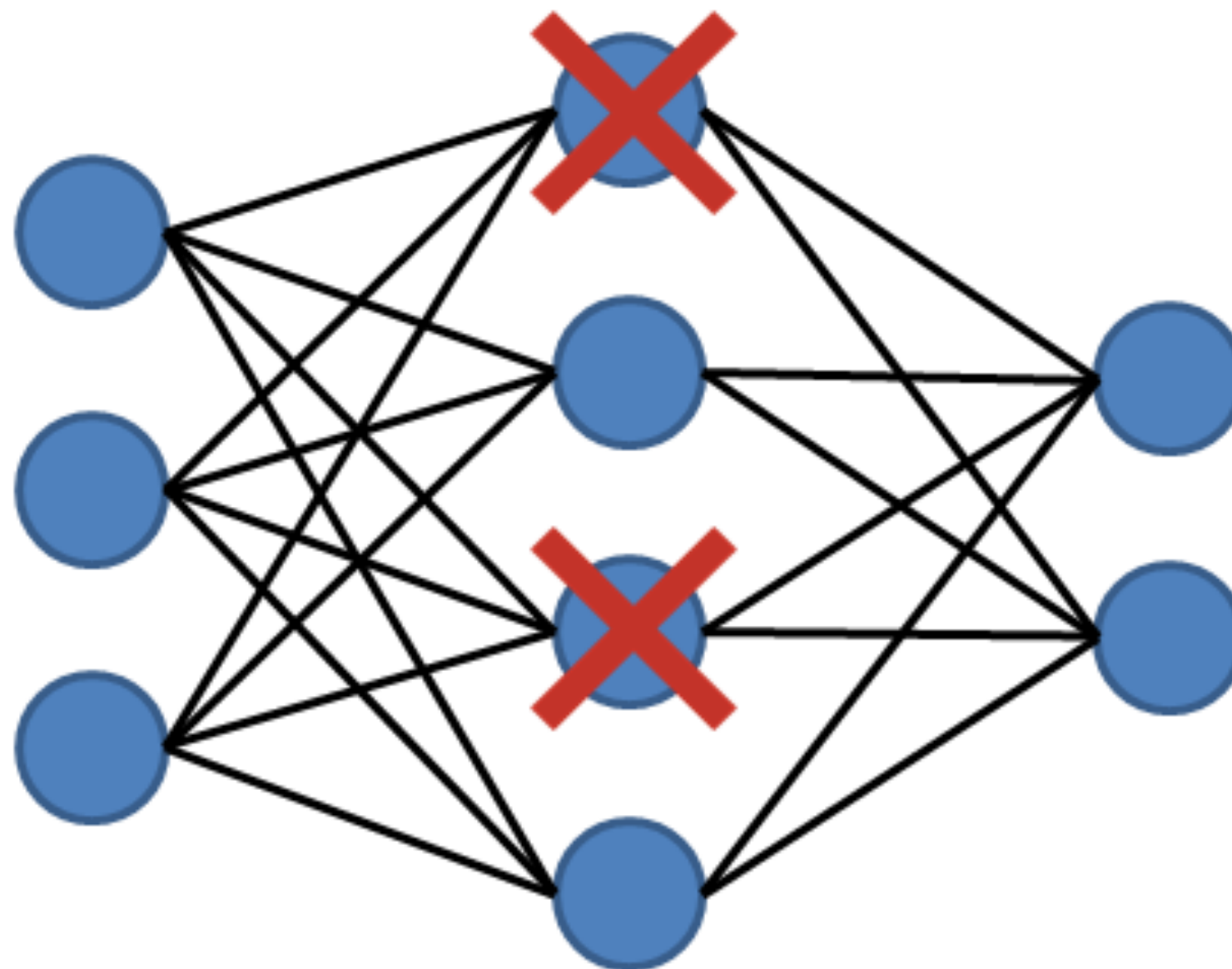# DATA AUGMENTATION

Recognition should not depend from position

Augment the dataset with small distortions

DROPOUT

DROPOUT