

# Convolutional Neural Networks for Image Classification

*Design Deep  
CNN  
models*

squirrel: 0.985



squirrel: 0.907



squirrel: 0.878



squirrel: 0.854



squirrel: 0.869



squirrel: 0.913



squirrel: 0.899



squirrel: 0.778



squirrel: 0.851



## Design Deep CNN models

*"Construct deep architectures for CNN models.*

*Write down designed architectures by the help of notation."*

### Step 1: How many Convolutional-Pooling pairs of layers?

Custom dataset

CIFAR-10 dataset

MNIST dataset

Traffic Signs dataset

## Step 2: How many Feature Maps in Convolutional layers?

Custom dataset

CIFAR-10 dataset

MNIST dataset

Traffic Signs dataset

## Step 3: How many Neurons in Fully connected layer?

Custom dataset

CIFAR-10 dataset

MNIST dataset

Traffic Signs dataset

## Step 4: How much Dropout?

Custom dataset

CIFAR-10 dataset

MNIST dataset

Traffic Signs dataset

## Step 5: Final design

Custom dataset

CIFAR-10 dataset

MNIST dataset

Traffic Signs dataset