

1 Standard defined tasks

- Image Classification

2 Important Ideas

2.1 Convolutional Neural Networks (CNN)

Yann LeCun 1998 - LeNet-5 was one of the first NN that utilized backpropagation using Supervised Learning

2.2 Deep Convolutional Neural Networks (CNN)

AlexNet 2012 - Image classifier on the ImageNet database. Built upon 1998 CNN work, scaled it up and run on GPU's

3 Why vision is important?

- A lot of major breakthroughs in ML have been realized in this field
- Visual perception is a very important ability for robotics

4 Important Tools

- OpenCV
- Tensorflow