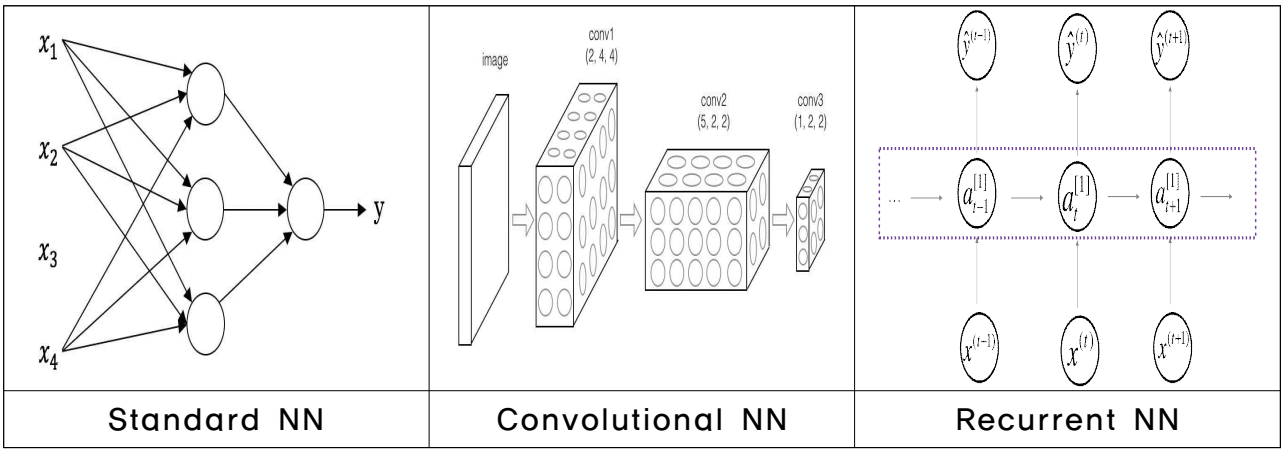
Introduction to Deep Learning

Neural Network examples



Standard NN	Convolutional NN	Recurrent NN

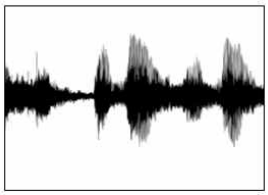
Supervised Learning

Structured Data

Size	#bedrooms	...	Price (1000$s)
2104	3		400
1600	3		330
2400	3		369
⋮	⋮		⋮
3000	4		540

User Age	Ad Id	...	Click
41	93242		1
80	93287		0
18	87312		1
⋮	⋮		⋮
27	71244		1

Unstructured Data



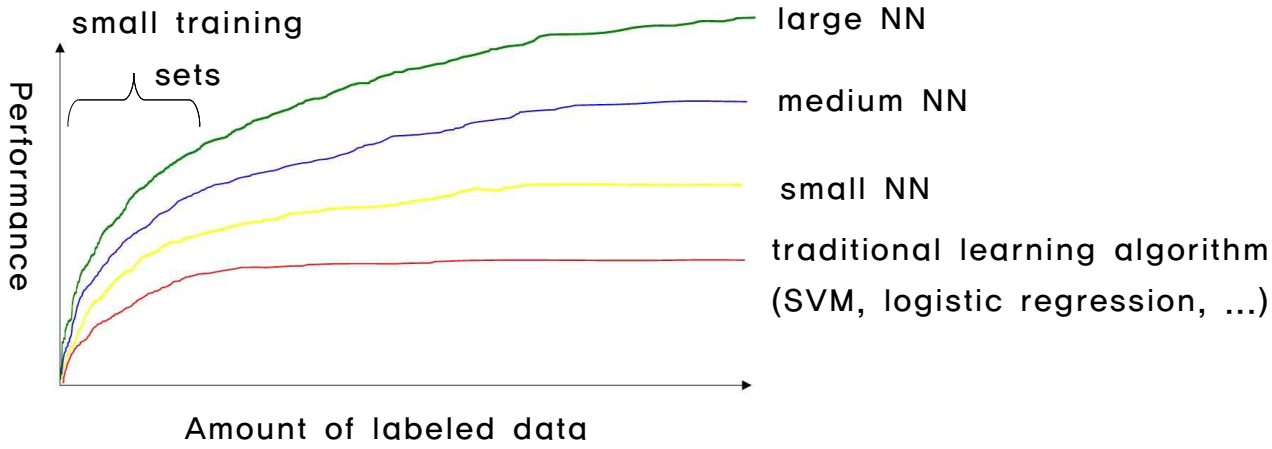
Audio

Image

Four scores and seven years ago...

Text

Scale drives deep learning progress



1. Data: Large and various datasets
2. Computation: CPU, GPU
3. Algorithms: Sigmoid, ReLU