

Notes for Week 1

Types of data

- *Structured data* : it is a primary type of input data which is organised in rows and columns .

Examples- data sets with features such as weight, height, territory, and season of some animal.

- *Unstructured data* : Input data which is in form of images, audios, text documents, emails, social media posts etc.

Types of neural networks

- *Standard neural networks* : Real Estate, Online Advertising, etc.
- *Convolutional neural network* : Image classification
- *Recurrent neural network* : Speech recognition and machine translation

Activation function

- Rectified linear unit (Relu)
- Sigmoid function

Rectified linear unit is preferred over sigmoid as gradient doesn't performance seems higher using Relu function. Relu introduces non linearity and adds complexity which helps the model to capture underlying patterns.

Generalization by the model is not possible if the training set size exceeds a certain limit.