**Week 1 – Notes**

**Introduction to Deep Learning**

**What is a Neural Network?**

ReLU = Rectified Linear Unit

**Supervised Learning with Neural Networks**

Structured data: tables

Unstructured data: text, audio, images

**Why is Deep Learning taking off?**

A traditional learning algorithm plateaus after adding a certain number of training examples, whereas large neural networks have better and better performance as the data set size increases

For small data sets, advanced feature engineering can help traditional learning algorithms to outperform neural networks

In this course m denotes the number of training examples

A ReLU function speeds up the learning process, while the sigmoid function learns slower when the input values are very small or large

A picture containing whiteboard

Description automatically generated Whiteboard

Description automatically generated