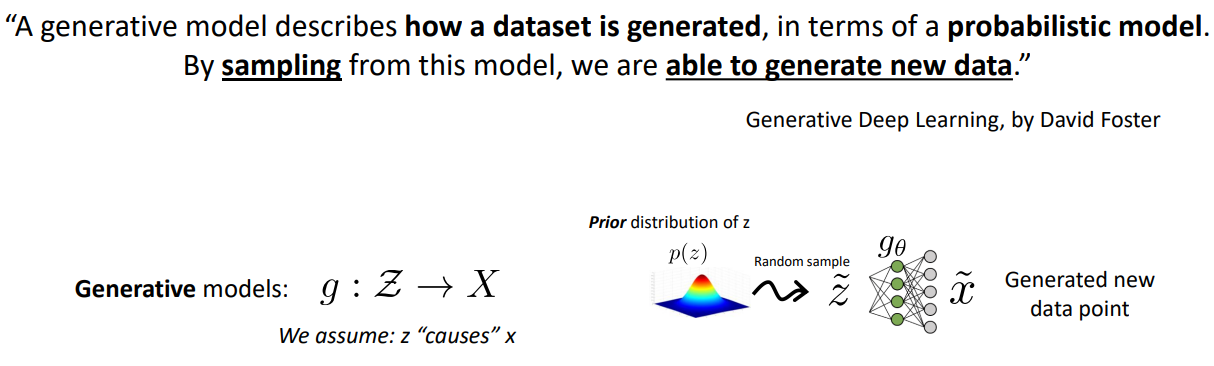
Week 10

**Generative Modelling**



Text

Description automatically generated

**Variational Auto Encoders**

They are just like Auto Encoders but the bottneck layer is divided into two parts.

**Graphical user interface, diagram, application, Word

Description automatically generated**

**Chart, diagram

Description automatically generated**

Smaller the standard deviation, smaller the chances of uncertainty.

When SD is 0, probability is 1 which is the predicted mean. Same behavior as Auto Encoders.

Diagram

Description automatically generated

SD must be positive.

SD will have low values around 0 so we can’t use ReLU.

Text

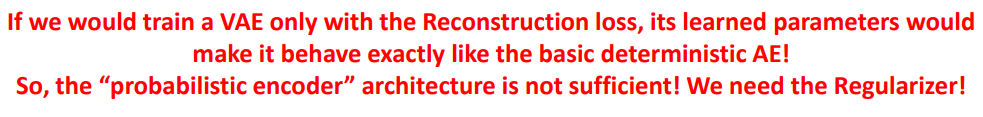
Description automatically generated

Text, letter

Description automatically generated

Text

Description automatically generated with medium confidence



Text, letter

Description automatically generated

Diagram

Description automatically generated



A picture containing diagram

Description automatically generated

Diagram

Description automatically generated