Neural Network Architecture:

- Importance of this perceptron
- Join operation
- Clean up
- About connecting the models

Multiple layers:

- Input layer
- Hidden layer
- Output layer
increasing number of input nodes to $n \rightarrow n$-dim data

Deep Neural Networks:

![Diagram of deep neural network with binary classification]

Multiclass classification:

- class A
- class B
- class C

option 1: three binary classification networks then we can use softmax or max

option 2: adding more nodes to the output layer!