## Basic components of a neural network

- Neurons: basic processing units of a neural network
- Layers: groups of neurons arranged in a sequence
  - Input layer: receives input data
  - Hidden layers: intermediate layers responsible for processing and learning features
  - Output layer: generates predictions or decisions based on learned features
- Weights and biases: parameters that the network learns during training
- Activation functions: non-linear functions applied to neuron outputs (e.g., ReLU, sigmoid, softmax)

