

# ANIMATION VIDEO REPORT – SIMPLE NEURAL NETWORK

This animation video explains how a simple neural network works. It shows each step clearly, from giving input data to getting the final output. The video helps viewers understand how machines learn by adjusting values and improving predictions.

## VIDEO EXPLANATION

The video starts with an introduction to neurons, which are small units that pass information, just like in the human brain. These neurons are arranged in three layers:

- **Input layer** – receives the data.
- **Hidden layer** – processes and learns features.
- **Output layer** – gives the final result.

It shows how each neuron takes input, multiplies it by weights, adds a bias, and passes it through an activation function like sigmoid or ReLU. This helps decide if a neuron should activate or not.

The next part of the video explains forward propagation, where data moves through the layers to make a prediction. Then it shows how errors are calculated — the difference between what the network predicted and the correct answer.

After that, the video demonstrates backpropagation, a process that adjusts the weights to reduce errors. This continues for many rounds, helping the network learn patterns and make better predictions.

Through colorful visuals and smooth animations, the video makes it easier to understand how neural networks learn and make decisions.

Submitted by

**ANNISHA S** (24MCR004)

**GOKILA N** (24MCR027)

**INDUJHA N** (24MCR034)

**JAYALAKSHMI** (24MCR042)

**KEERTHANA** (24MCR056)

**MATHU BALA S** (24MCR063)