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Imagine a neural network as a kind of black box, which takes one or multiple inputs, like the sensors of a self-driving car, processing them into one or multiple outputs, like the controls for that car. The neural network itself consists of many small units called neurons. These neurons are grouped into several layers. Neurons of one layer intersect with the neurons of the next layer through weighted connections, which really adjusts connections with a real valued number attached to them. A neuron takes the value of a connected neuron and multiplies it with their connection's weight. The sum of all connected neurons at the neuron's bias value is then put into a so-called activation function, which simply mathematically transforms the value, before it finally can be passed on to the next neuron. This way the inputs are propagated through the whole network. That's pretty much all the network does. But the real deal behind neural networks is to find the right weights in order to get the right results. This can be done through a wide range of techniques, such as machine learning. However, that's the topic for another