

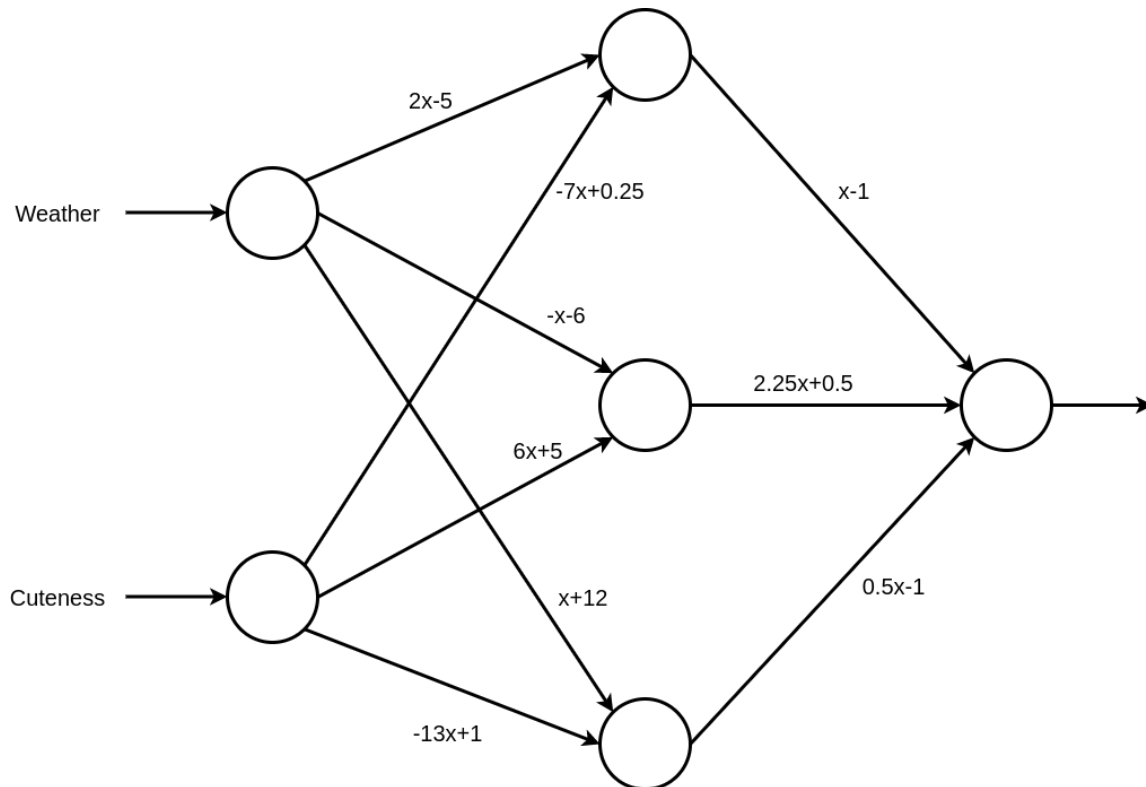
1 Multiple Choice (5Pts)

1. Which layer in the internet protocol suite is responsible for maintaining information:
 - (a) The Data layer
 - (b) The Link layer
 - (c) The Application layer
 - (d) The Transport Layer
2. HTTP is
 - (a) a set of rules for communication on the World Wide Web
 - (b) a language for displaying web addresses
 - (c) a location for something on the internet
 - (d) the laboratory where the World Wide Web started
3. Which cloud service could I use to provide email for my company:
 - (a) Infrastructure as a Service
 - (b) Software as a Service
 - (c) Platform as a Service
 - (d) all of the above
4. Which is not a type of machine learning model:
 - (a) Decision Tree
 - (b) Recurrent Neural network
 - (c) Confluence Neural network
 - (d) Transformer
5. The component of the computer responsible for providing power to components is the:
 - (a) power supply
 - (b) power board
 - (c) current supply
 - (d) capacitor

2 Show Your Work

Problem 1 (5 Pts)

Below is a network to predict whether or not I should leave my house. If the output is greater than 0, I will, otherwise I won't. The inputs are the temperature (in Fahrenheit) and how cute my cat is looking (on a scale of 1 to 10). Currently, it is 10°F , but my cat has decided to sing the song of his people, so he's a 2 on the cute scale. Using the network and this input, calculate the value for each neuron and tell me if I should go outside:



3 Short Answer

Question 1 (4 Pts)

Describe the benefits of both Wired vs Wireless internet connections:

Question 2 (4 Pts)

Explain two benefits of using cloud computing:

Question 3 (2 Pts)

What do we mean when we say a neural network is "learning"?