**Lesson 06**

**CSC357 Machine Learning**

**23 January 2020**

**Activation Function**

**Instructor:** **Leon Tabak**

**Authors:** **Chenxi Liu, Yudong Zhang, Linda Wang, Alex Heisdorffer**

* **What is activation function?**

Explanations: It’s just a thing function that you use to get the output of node. It is also known as **transfer function.**

**Illustrations:**



* **What is the purpose of activation function?**

**Activation function** decides whether a neuron should be activated or not by calculating weighted sum and further adding bias with it. The **purpose** of the **activation function** is to introduce non-linearity into the output of a neuron.



* **Questions?**
	+ How many activation functions I mentioned above?
	+ Which activation function does logistic regressor use?

* **References:**

Activation Function in Neural Network: <https://medium.com/the-theory-of-everything/understanding-activation-functions-in-neural-networks-9491262884e0>

Introduction of Activation Function: <https://towardsdatascience.com/activation-functions-neural-networks-1cbd9f8d91d6>

Understand logistic regression: <https://www.datacamp.com/community/tutorials/understanding-logistic-regression-python>