08-08-2024

Project

- NLP competitions: https://semeval.github.io/SemEval2025/tasks
- NLP in Legal domain
- Sign language (Indian)
- NLP for low resource language
- …

Single neuron activity

- How to pass/propagate the signal to the next level ?

  ‣ Activation function

    - Sigmoid: $f(x) = \dfrac{1}{1 + e^{-x}}$

    - Tanh: $f(x) = \dfrac{e^x - e^{-x}}{e^x + e^{-x}}$

    - Rectified Linear Unit (ReLU) (Krizhevsky et. al. 2012): $f(x) = max(0, x)$

    - Leaky ReLU (Maas et. al. 2013): $f(x) = I(x < 0)\alpha x + I(x > 0)x$

    - Maxout (Goodfellow et. Al. 2013): $f(x) = max(W_1^T x + b1,, W_2^T x + b2)$