

Please describe when to use logistic sigmoid, tanh, and Fourier as basis function.

All the above are used as an activation function. It is used to determine the output of neural network like yes or no. It maps the

Sigmoid: it is especially used for models where we have to predict the probability as an output. Since probability of anything exists only between the range of 0 and 1, The function is differentiable. That means, we can find the slope of the sigmoid curve

Tanh: The advantage is that the negative inputs will be mapped strongly negative and the zero inputs will be mapped near

zero in the tanh graph. The function is differentiable. The range of the tanh function is from (-1 to 1).

Fourier: We use fourier when we have Sines and cosines form an basis for square-integrable functions.

resulting values in between 0 to 1 or -1 to 1 etc.

at any two points.