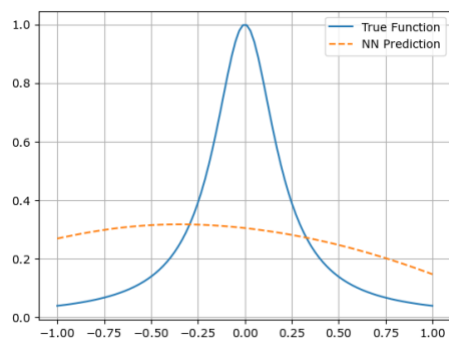


我們使用 4 層(3 層隱藏層+輸出層)的 Neuron network 來估計這個 runge

function , 學習率為 0.1

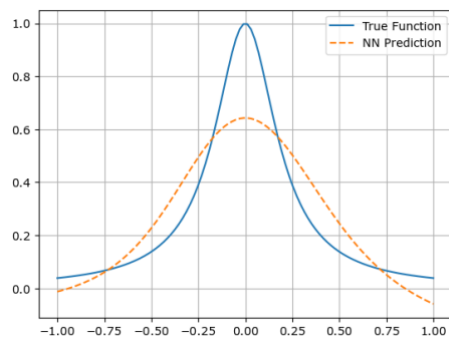
$$f(x) = \frac{1}{1 + 25x^2}, \quad x \in [-1, 1].$$

True function with 50 epochs NN prediction



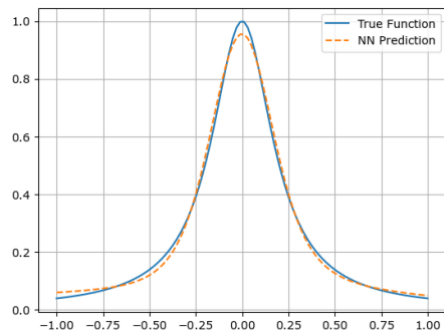
MSE: 0.07107630614092773

True function with 500 epochs NN prediction



MSE: 0.015596773314838894

True function with 5000 epochs NN prediction



MSE: 0.00029031547391471837

Loss function curve

