

黃偉祥 X1136010

When predicting values using sine wave data, is there a performance difference between the model that only contains Dense layers and one that includes an RNN layer? Which performs better?

- Yes, model with RNN layers perform better, but it takes more time consumption.

Have you tried stacking two consecutive RNN layers in the model? How would you configure the parameters for the second RNN layer if the first RNN layer is defined as RNN(1, 16)? Briefly explain your reasoning.

- Yes, but it will not necessarily have better performance. RNN(16,16), because the first layer of RNN will make the output with 16 hidden state. And output of second layer of RNN need to be the same as input, or it will have size not match error.

What would be the effects with the larger size of hidden units in RNN layer?

- Time consumption will be larger, since the RNN model need to calculate more hidden state.
- Performance may be better or lead to overfitting, depends on the data size.