

	model 1	model 2	model 3	model 4	model 5	model 6
model	simple LSTM-based	drop-out LSTM	droup-out stacked GRU	droup-out stacked GRU	droup-out stacked LSTM	droup-out stacked LSTM with Conv1D
dropout		yes	yes	yes	yes	yes
LSTM	yes	yes			yes	yes
GRU			yes	yes		
stacked			yes	yes	yes	yes
Conv1D						yes
epoches	10	50	50	20	20	20
units	16	32	32	64	32	64
Test MAE	2.63	2.5	2.91	2.81	2.88	3.07

The duration required to run 50 epochs can be excessively long, sometimes taking up to a day, which is why I reduced the number of epochs to 20 for models 4, 5, and 6. This adjustment might have contributed to the reduced performance. Additionally, to ensure compatibility with Google Colab, I omitted the callback step. Generally speaking, incorporating LSTM layers and increasing the number of units tends to enhance model performance, whereas incorporating Conv1D layers appears to offer no benefit.

Google colab web link: https://github.com/zhaoyang1209/yangzhao_64061.git