

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>