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1 RESULTS

1.1 Exp-1 (NH_3N baseline model)

1.1.1 Keys

- ☐ The benefit of data pre-processing by comparing validation and test loss.
- ☐ The selection of best model by comparing validation and test loss.
- ☐ Test data could be in poor quality.
- ☐ Show another test data results and compare the test and valid loss.

1.1.2 Fig and table

- Exp 1
- result 1

  After sorting the test loss from the lowest to the highest, we observed that the test loss from lowest doesn't match with the valid loss from lowest.

Table 1.1: Comparison of NH_3N valid loss and test loss from 1/16 to 1/22.

GRU	Test loss mean	Valid loss mean	LSTM	Test loss mean	Valid loss mean
sg7	0.0383	1.2508	ew3	0.0388	**1.0796**(1)
sg5	0.0385	1.2644	sg7	0.0388	1.1804
ew2	0.0389	**1.1891**(1)	sg5	0.0388	1.2346
ew4	0.0391	**1.2390**(3)	ew2	0.0392	**1.0969**(2)
ew3	0.0392	**1.2199**(2)	ew4	0.0395	**1.1219**(3)
sg9	0.0396	1.3097	or	0.0398	1.2612
or	0.0405	1.3993	obs	0.0405	1.2366
obs	0.0414	1.3638	sg9	0.0410	1.3076

Table 1.2: Comparison of NH_3N valid loss and test loss from 10/10 to 10/16.

GRU	Test loss mean	Valid loss mean	LSTM	Test loss mean	Valid loss mean
ew3	0.0167	**1.2199**(2)	ew2	0.0161	**1.0969**(2)
ew4	0.0169	**1.2390**(3)	ew3	0.0158	**1.0796**(1)
ew2	0.0170	**1.1891**(1)	ew4	0.0163	**1.1219**(3)
sg9	0.0174	1.3097	obs	0.0175	1.2366

GRU	Test loss mean	Valid loss mean	LSTM	Test loss mean	Valid loss mean
sg5	0.0178	1.2644	or	0.0177	1.2612
sg7	0.018	1.2508	sg5	0.0166	1.2346
or	0.0187	1.3993	sg7	0.018	1.1804
obs	0.0189	1.3638	sg9	0.0188	1.3076

Table 1.3: Valid and test loss from 1/16 to 1/22.

Model-dataset	Validation Loss	Model-dataset	Test loss
LSTM-ew3	1.0796	**GRU-sg7**	0.0383
LSTM-ew2	1.0969	GRU-sg5	0.0385
LSTM-ew4	1.1219	**LSTM-ew3**	0.0388
LSTM-sg7	1.1804	**LSTM-sg7**	0.0388
GRU-ew2	1.1891	**LSTM-sg5**	0.0388
GRU-ew3	1.2199	**GRU-ew2**	0.0389
LSTM-sg5	1.2346	**GRU-ew4**	0.0391
LSTM-obs	1.2366	**LSTM-ew2**	0.0392
GRU-ew4	1.239	**GRU-ew3**	0.0392
GRU-sg7	1.2508	**LSTM-ew4**	0.0395

Table 1.4: Valid and test loss from 1/16 to 1/22.

Model-dataset	Validation Loss	Model-dataset	Test loss
LSTM-ew3	1.0796	**LSTM-ew3**	0.0158
LSTM-ew2	1.0969	**LSTM-ew2**	0.0161

Model-dataset	Validation Loss	Model-dataset	Test loss
LSTM-ew4	1.1219	**LSTM-ew4**	0.0163
LSTM-sg7	1.1804	**LSTM-sg5**	0.0166
GRU-ew2	1.1891	**GRU-ew3**	0.0167
GRU-ew3	1.2199	**GRU-ew4**	0.0169
LSTM-sg5	1.2346	**GRU-ew2**	0.0170
LSTM-obs	1.2366	GRU-sg9	0.0174
GRU-ew4	1.239	**LSTM-obs**	0.0175
GRU-sg7	1.2508	LSTM-or	0.0177

Table 1.5: Schematic for restriction digestion with a single restriction enzyme. Some really long text that shows how the caption is formatted when it takes multiple lines.

Reagent	Amount
Appropriate Buffer (10x)	1x
DNA	50-500ng
Restriction Enzyme	1U
Water	-

1.2 Exp-2

1.3 Exp-5

1.4 Exp-6

2 Result

2.1 sdfas

Table 2.1: Validation and test loss comparison from 1/16 to 1/22.

Model-dataset	Validation Loss
LSTM-ew3	1.0796
LSTM-ew2	1.0969
LSTM-ew4	1.1219

2.2 asdf

Table 2.2: Validation and test loss comparison from 1/16 to 1/22.

Model-dataset	Validation Loss	Model-dataset	Test loss
LSTM-ew3	1.0796	GRU-sg7	0.0383
LSTM-ew2	1.0969	GRU-sg5	0.0385
LSTM-ew4	1.1219	**LSTM-ew3**	0.0388

Thanks, it works. But I have another problem now. My images are a little large, and when put in the same row they cannot fit into one slide. Is it possible to control the size of the image? Thanks, it works. But I have another problem now. My images are a little large, and when put in the same row they cannot fit into one slide. Is it possible to control the size of the image? Thanks, it works. But I have another problem now. My images are a little large, and when put in the same row they cannot fit into one slide. Is it possible to control the size of the image? Thanks, it works. But I have another problem now. My images are a little large, and when put in the same row they cannot fit into one slide. Is it possible to control the size of the image?

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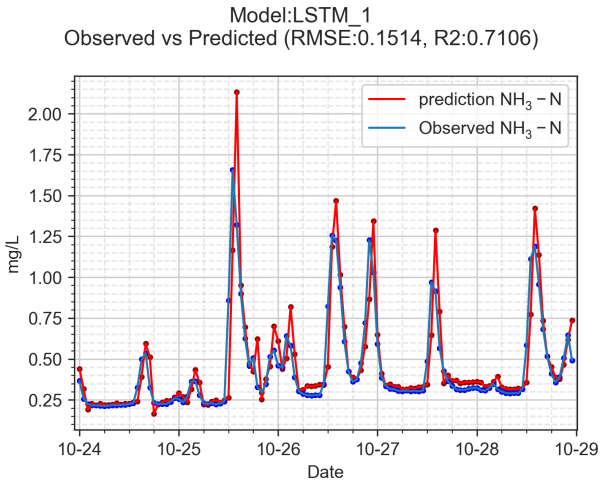

Figure 2.1: tesst

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