

These 2 tables are the result of predicting the next day's closing price based on the previous 5 days.

Normalized Metrics (5 to 1):

Model Name	Dataset - 1 (AAPL)			Dataset - 2 (AAL)			Dataset - 3 (ABC)		
	R2 ↑	MAE ↓	RMSE ↓	R2 ↑	MAE ↓	RMSE ↓	R2 ↑	MAE ↓	RMSE ↓
Transformer (Encoder Only)	0.923	0.054	0.067	0.901	0.067	0.091	0.90	0.103	0.147
Transformer (Decoder Only)	0.83	0.087	0.09	0.878	0.075	0.10	0.926	0.089	0.127
Transformer (Encoder - Decoder)	0.85	0.073	0.094	0.766	0.141	0.118	0.92	0.106	0.133
LSTM	0.83	0.084	0.10	0.874	0.077	0.10	0.914	0.10	0.138
Mamba	0.948	0.045	0.056	0.917	0.062	0.084	0.949	0.076	0.106
Mamba (Encoder Only)	0.753	0.089	0.121	0.885	0.726	0.099	0.931	0.086 2	0.123
BiMamba	0.948	0.045	0.055	0.919	0.061	0.082	0.96	0.065	0.094
CrossMamba	0.942	0.047	0.058	0.920	0.06	0.082	0.963	0.062	0.090

Denormalized Metrics (USD) (5 to 1) :

Model Name	Dataset - 1 (AAPL)			Dataset - 2(AAL)			Dataset - 3 (ABC)		
	MAPE ↓	MAE ↓	RMSE ↓	MAPE ↓	MAE ↓	MAPE ↓	MAPE ↓	MAE ↓	RMSE ↓
Transformer (Encoder Only)	1.46%	2.57\$	3.18\$	1.48%	0.74\$	1.00\$	1.98%	1.67\$	2.41\$
Transformer (Decoder Only)	2.38%	4.13\$	4.69\$	1.65%	0.82\$	1.12\$	1.66%	1.45\$	2.08\$
Transformer (Encoder - Decoder)	3.14%	7.30\$	9.46\$	5.86%	11.84\$	14.13\$	9.32%	10.63\$	13.34\$
LSTM	2.22%	3.98\$	4.74\$	1.69%	0.85\$	1.14\$	1.9%	1.65\$	2.26\$
Mamba	1.2%	2.13\$	2.61\$	1.37%	0.68\$	0.92\$	1.47%	1.25\$	1.73\$
Mamba (Encoder Only)	2.30%	4.19\$	5.70\$	1.59%	0.80\$	1.09\$	1.65%	1.41\$	2.02\$
BiMamba	1.22%	2.12\$	2.62\$	1.34%	0.67\$	0.91\$	1.22%	1.07\$	1.53\$
CrossMamba	2.21%	4.71\$	5.86\$	3.01%	6.03\$	8.27\$	5.40%	6.22\$	9.05\$

These 2 tables are the result of predicting the next day's closing price based on the previous 10 days.

Normalized Metrics (10 to 1):

Model Name	Dataset - 1 (AAPL)			Dataset - 2 (AAL)			Dataset - 3 (ABC)		
	R2 ↑	MAE ↓	RMSE ↓	R2 ↑	MAE ↓	RMSE ↓	R2 ↑	MAE ↓	RMSE ↓
Transformer (Encoder Only)	0.887	0.063	0.08	0.86	0.084	0.109	0.925	0.102	0.129
Transformer (Decoder Only)	0.897	0.065	0.077	0.872	0.082	0.104	0.916	0.114	0.136
Transformer (Encoder - Decoder)	0.846	0.79	0.094	0.90	0.066	0.088	0.935	0.084	0.12
LSTM	0.838	0.081	0.096	0.854	0.084	0.11	0.924	0.94	0.13
Mamba	0.954	0.04	0.051	0.909	0.066	0.088	0.952	0.073	0.103
Mamba (Encoder Only)	0.624	0.103	0.147	0.774	0.105	0.139	0.884	0.116	0.16
BiMamba	0.944	0.044	0.056	0.92	0.06	0.082	0.963	0.062	0.09
CrossMamba	0.953	0.041	0.051	0.917	0.062	0.084	0.959	0.068	0.095

DeNormalized Metrics (10 to 1):

Model Name	Dataset - 1 (AAPL)			Dataset - 2(AAL)			Dataset - 3 (ABC)		
	MAPE ↓	MAE ↓	RMSE ↓	MAPE ↓	MAE ↓	MAPE ↓	MAPE ↓	MAE ↓	RMSE ↓
Transformer (Encoder Only)	1.78%	3.10\$	3.62\$	1.87%	0.93\$	1.2\$	1.92%	1.68\$	2.5\$
Transformer (Decoder Only)	2.38%	4.13\$	4.69\$	1.82%	0.90\$	1.15\$	2.15%	1.87\$	2.23\$
Transformer (Encoder - Decoder)	3.79%	7.91\$	9.44\$	3.31%	6.65\$	8.83\$	7.17%	8.49\$	12.0\$
LSTM	2.12%	3.81\$	4.54\$	1.84%	0.93\$	1.22\$	1.77%	1.54\$	2.12\$
Mamba	1.09%	1.92\$	2.41\$	1.44%	0.72\$	0.97\$	1.40%	1.20\$	1.68\$
Mamba (Encoder Only)	2.63%	4.84\$	6.93\$	2.26%	1.16\$	1.53\$	2.24%	1.89\$	2.62\$
BiMamba	1.21%	2.09\$	2.66\$	1.34%	0.67\$	0.91\$	1.17%	1.01\$	1.48\$
CrossMamba	1.88%	4.18\$	5.17\$	3.11%	6.21\$	8.42\$	6.18%	6.87\$	9.55\$