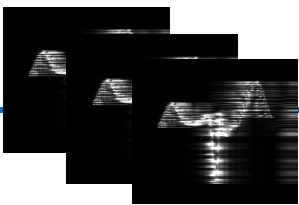


US	Europe	Asia	FX	Rates	Futures	Crypto
Asia Dow		3,337.50	-16.83	-0.50%		
Nikkei 225		32,166.48	-105.34	-0.33%		
Hang Seng		17,577.67	-92.49	-0.52%		
Shanghai		3,052.37	-4.90	-0.16%		
Sensex		65,022.65	80.25	0.12%		
Singapore		3,126.24	-47.57	-1.50%		



loss-1

Loss

loss-1

loss-2

loss-3

$$\mathcal{L}_{all} = \mathcal{L}_1 + \mathcal{L}_2 + \mathcal{L}_3$$

### Modality Completion Module

### Decoder

#### Transformer Decoder

#### LSTM Decoder

#### Attention\_Fusion

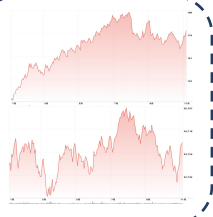
Downstream task

loss-3

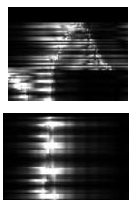
### Stock forecast



### Stocks Trend forecast



### Abnormal heart rate detection



Complete mode

Or

Missing mode

Generate

### Modal completion

loss-2

- DBN
- Hidden Layers
- Embedding
- DBN\_Attention
- Add&Norm
- Add\_MAP
- Forward

	0	1	2	3	4	5	6
0	-0.42	-0.415	-0.42	-0.425	-0.435	-0.435	-0.445
1	-0.495	-0.48	-0.485	-0.485	-0.515	-0.52	-0.525
2	-0.44	-0.445	-0.455	-0.49	-0.495	-0.48	-0.475
3	-0.285	-0.265	-0.265	-0.265	-0.275	-0.28	-0.27
4	-0.3	-0.29	-0.29	-0.305	-0.31	-0.315	-0.305
5	-0.51	-0.51	-0.52	-0.535	-0.54	-0.53	-0.53
6	-0.125	-0.135	-0.14	-0.14	-0.145	-0.125	-0.135

Why oil prices just dropped to their lowest since July



Why Warren Buffett has done more should go to educate investors than any other corporate executive