Time Series Model:

Hyperparameter	Value
Regularization	L2
Penalty Term	0.01
Learning Rate	0.0001
Optimizer	adam
Loss	Binary Cross Entropy
Activation Function	Sigmoid
Layers	LSTM, GRU
Dropout	N/A
Batch Size	128
Epochs	100

Multimodal:

Hyperparameter	Value
Regularization	L2
Penalty Term	0.01
Learning Rate	0.001
Optimizer	adam
Decay	0.01
Loss	Binary Cross Entropy
Activation Function	Sigmoid
Layers	GRU
Dropout	0.2
Batch Size	64
Epochs	100

Proposed:

Hyperparameter	Value
Regularization	L2
Penalty Term	0.01
Learning Rate	1e-3
Optimizer	adam
Decay	0.01
Loss	Binary Cross Entropy
Activation Function	Sigmoid
Layers	GRU
Dropout	0.2
Batch Size	64
Epochs	100