

Supplementary table S1. The structure of the models

	Description	Model Structure	Hidden Layer Size	Epochs	Slice Length (sec)	AUROC
Fragmented model (Manual Data)	Final Model	Dense + Batchnorm + l-relu +Dropout	512	400		0.841
	No Dropout	Dense + Batchnorm + l-relu	512	400		0.822
	Hidden-Size=256	Dense + Batchnorm + l-relu +Dropout	256	400		0.815
	Hidden-Size=128	Dense + Batchnorm + l-relu +Dropout	128	400		0.778
	Epoch 100	Dense + Batchnorm + l-relu +Dropout	512	100		0.806
	Epoch 200	Dense + Batchnorm + l-relu +Dropout	512	200		0.808
Fragmented model (Device Data)	Final Model	Dense + Batchnorm + l-relu +Dropout	512	400	600	0.858
	No Dropout	Dense + Batchnorm + l-relu	512	400	600	0.832
	Hidden-Size=256	Dense + Batchnorm + l-relu +Dropout	256	400	600	0.827
	Hidden-Size=128	Dense + Batchnorm + l-relu +Dropout	128	400	600	0.785
	Model with shorter Slice	Dense + Batchnorm + l-relu +Dropout	512	400	300	0.839
	Epoch 200	Dense + Batchnorm + l-relu +Dropout	512	200	600	0.848
Accumulated model (Manual Data)	Final Model	LSTM + Dense + Batchnorm + l-relu +Dropout	Dense: 512 / LSTM: 128	400		0.853
	No Dropout	LSTM + Dense + Batchnorm + l-relu	Dense: 512 / LSTM: 128	400		0.818
	Hidden-Size=256	LSTM + Dense + Batchnorm + l-relu +Dropout	Dense: 256 / LSTM: 128	400		0.82
	Epoch 150	LSTM + Dense + Batchnorm + l-relu +Dropout	Dense: 512 / LSTM: 128	150		0.833
	Epoch 200	LSTM + Dense + Batchnorm + l-relu +Dropout	Dense: 512 / LSTM: 128	200		0.838
Accumulated model (Device Data)	Final Model	LSTM + Dense + Batchnorm + l-relu +Dropout	Dense: 512 / LSTM: 128	400	600	0.861
	No Dropout	LSTM + Dense + Batchnorm + l-relu	Dense: 512 / LSTM: 128	400	600	0.845
	Hidden-Size=256	LSTM + Dense + Batchnorm + l-relu +Dropout	Dense: 256 / LSTM: 128	400	600	0.784
	Model with shorter Slice	LSTM + Dense + Batchnorm + l-relu +Dropout	Dense: 512 / LSTM: 128	400	300	0.809
	Epoch 200	LSTM + Dense + Batchnorm + l-relu +Dropout	Dense: 512 / LSTM: 128	200	600	0.85

AUROC, Area under the receiver operating characteristic curve; LSTM, Long short-term memory