hypercount: 1

i+Onedir\_1\_lr\_0.001\_nodrop

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [2] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [3] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [4] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [5] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [6] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [7] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [8] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [9] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [10] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [11] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

out of patience

Finished Training

starttime = 2021-01-09 00:11:22.028471

endtime = 2021-01-09 00:20:35.919677

Last model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.252

Accuracy for Classifier : 0.42

Cut off: 1.4878

[[1999 0]

[2777 0]]

Best model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.252

Accuracy for Classifier : 0.42

Cut off: 1.4878

[[1999 0]

[2777 0]]

hypercount: 2

i+Onedir\_1\_lr\_0.0001\_nodrop

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.237.. Validation loss: 0.782..

AUC: 0.50 PR AUC: 0.53

Epoch [2] out of 80

Training loss: 1.206.. Validation loss: 0.833..

AUC: 0.50 PR AUC: 0.53

Epoch [3] out of 80

Training loss: 1.199.. Validation loss: 0.857..

AUC: 0.50 PR AUC: 0.53

Epoch [4] out of 80

Training loss: 1.198.. Validation loss: 0.867..

AUC: 0.50 PR AUC: 0.53

Epoch [5] out of 80

Training loss: 1.198.. Validation loss: 0.871..

AUC: 0.50 PR AUC: 0.53

Epoch [6] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [7] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [8] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [9] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [10] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [11] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

out of patience

Finished Training

starttime = 2021-01-09 00:20:36.418695

endtime = 2021-01-09 00:29:50.921484

Last model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.246

Accuracy for Classifier : 0.42

Cut off: 1.5258

[[1999 0]

[2777 0]]

Best model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.246

Accuracy for Classifier : 0.42

Cut off: 1.5258

[[1999 0]

[2777 0]]

hypercount: 3

i+Onedir\_1\_lr\_0.001\_drop0.2

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0.2, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.197.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [2] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [3] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [4] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [5] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [6] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [7] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [8] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [9] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [10] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [11] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

out of patience

Finished Training

starttime = 2021-01-09 00:29:51.394850

endtime = 2021-01-09 00:39:07.443353

Last model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.252

Accuracy for Classifier : 0.42

Cut off: 1.4878

[[1999 0]

[2777 0]]

Best model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.252

Accuracy for Classifier : 0.42

Cut off: 1.4878

[[1999 0]

[2777 0]]

hypercount: 4

i+Onedir\_1\_lr\_0.0001\_drop0.2

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0.2, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.169.. Validation loss: 0.764..

AUC: 0.78 PR AUC: 0.44

Epoch [2] out of 80

Training loss: 1.146.. Validation loss: 0.737..

AUC: 0.82 PR AUC: 0.46

Epoch [3] out of 80

Training loss: 1.137.. Validation loss: 0.724..

AUC: 0.82 PR AUC: 0.45

Epoch [4] out of 80

Training loss: 1.131.. Validation loss: 0.716..

AUC: 0.82 PR AUC: 0.45

Epoch [5] out of 80

Training loss: 1.129.. Validation loss: 0.715..

AUC: 0.82 PR AUC: 0.45

Epoch [6] out of 80

Training loss: 1.126.. Validation loss: 0.713..

AUC: 0.83 PR AUC: 0.46

Epoch [7] out of 80

Training loss: 1.126.. Validation loss: 0.712..

AUC: 0.84 PR AUC: 0.46

Epoch [8] out of 80

Training loss: 1.126.. Validation loss: 0.710..

AUC: 0.84 PR AUC: 0.45

Epoch [9] out of 80

Training loss: 1.125.. Validation loss: 0.708..

AUC: 0.84 PR AUC: 0.45

Epoch [10] out of 80

Training loss: 1.124.. Validation loss: 0.706..

AUC: 0.84 PR AUC: 0.45

Epoch [11] out of 80

Training loss: 1.124.. Validation loss: 0.705..

AUC: 0.85 PR AUC: 0.46

Epoch [12] out of 80

Training loss: 1.122.. Validation loss: 0.701..

AUC: 0.85 PR AUC: 0.45

Epoch [13] out of 80

Training loss: 1.122.. Validation loss: 0.698..

AUC: 0.84 PR AUC: 0.45

Epoch [14] out of 80

Training loss: 1.121.. Validation loss: 0.694..

AUC: 0.83 PR AUC: 0.44

Epoch [15] out of 80

Training loss: 1.122.. Validation loss: 0.692..

AUC: 0.84 PR AUC: 0.45

Epoch [16] out of 80

Training loss: 1.121.. Validation loss: 0.686..

AUC: 0.84 PR AUC: 0.44

Epoch [17] out of 80

Training loss: 1.120.. Validation loss: 0.682..

AUC: 0.84 PR AUC: 0.44

Epoch [18] out of 80

Training loss: 1.120.. Validation loss: 0.678..

AUC: 0.84 PR AUC: 0.45

Epoch [19] out of 80

Training loss: 1.119.. Validation loss: 0.674..

AUC: 0.84 PR AUC: 0.44

Epoch [20] out of 80

Training loss: 1.119.. Validation loss: 0.673..

AUC: 0.86 PR AUC: 0.45

Epoch [21] out of 80

Training loss: 1.118.. Validation loss: 0.667..

AUC: 0.85 PR AUC: 0.44

Epoch [22] out of 80

Training loss: 1.117.. Validation loss: 0.659..

AUC: 0.84 PR AUC: 0.44

Epoch [23] out of 80

Training loss: 1.117.. Validation loss: 0.658..

AUC: 0.86 PR AUC: 0.45

Epoch [24] out of 80

Training loss: 1.114.. Validation loss: 0.649..

AUC: 0.86 PR AUC: 0.45

Epoch [25] out of 80

Training loss: 1.114.. Validation loss: 0.643..

AUC: 0.86 PR AUC: 0.45

Epoch [26] out of 80

Training loss: 1.113.. Validation loss: 0.638..

AUC: 0.85 PR AUC: 0.45

Epoch [27] out of 80

Training loss: 1.113.. Validation loss: 0.633..

AUC: 0.85 PR AUC: 0.45

Epoch [28] out of 80

Training loss: 1.112.. Validation loss: 0.630..

AUC: 0.86 PR AUC: 0.45

Epoch [29] out of 80

Training loss: 1.111.. Validation loss: 0.628..

AUC: 0.88 PR AUC: 0.47

Epoch [30] out of 80

Training loss: 1.109.. Validation loss: 0.620..

AUC: 0.86 PR AUC: 0.45

Epoch [31] out of 80

Training loss: 1.109.. Validation loss: 0.620..

AUC: 0.87 PR AUC: 0.46

Epoch [32] out of 80

Training loss: 1.108.. Validation loss: 0.616..

AUC: 0.86 PR AUC: 0.46

Epoch [33] out of 80

Training loss: 1.108.. Validation loss: 0.616..

AUC: 0.86 PR AUC: 0.45

Epoch [34] out of 80

Training loss: 1.107.. Validation loss: 0.616..

AUC: 0.88 PR AUC: 0.46

Epoch [35] out of 80

Training loss: 1.106.. Validation loss: 0.612..

AUC: 0.86 PR AUC: 0.46

Epoch [36] out of 80

Training loss: 1.105.. Validation loss: 0.613..

AUC: 0.86 PR AUC: 0.45

Epoch [37] out of 80

Training loss: 1.106.. Validation loss: 0.615..

AUC: 0.88 PR AUC: 0.46

Epoch [38] out of 80

Training loss: 1.105.. Validation loss: 0.610..

AUC: 0.84 PR AUC: 0.45

Epoch [39] out of 80

Training loss: 1.104.. Validation loss: 0.613..

AUC: 0.86 PR AUC: 0.46

Epoch [40] out of 80

Training loss: 1.103.. Validation loss: 0.609..

AUC: 0.84 PR AUC: 0.45

Epoch [41] out of 80

Training loss: 1.104.. Validation loss: 0.615..

AUC: 0.86 PR AUC: 0.46

Epoch [42] out of 80

Training loss: 1.104.. Validation loss: 0.610..

AUC: 0.85 PR AUC: 0.45

Epoch [43] out of 80

Training loss: 1.104.. Validation loss: 0.615..

AUC: 0.84 PR AUC: 0.45

Epoch [44] out of 80

Training loss: 1.104.. Validation loss: 0.623..

AUC: 0.87 PR AUC: 0.47

Epoch [45] out of 80

Training loss: 1.102.. Validation loss: 0.620..

AUC: 0.85 PR AUC: 0.46

Epoch [46] out of 80

Training loss: 1.104.. Validation loss: 0.617..

AUC: 0.84 PR AUC: 0.45

Epoch [47] out of 80

Training loss: 1.104.. Validation loss: 0.622..

AUC: 0.85 PR AUC: 0.46

Epoch [48] out of 80

Training loss: 1.102.. Validation loss: 0.622..

AUC: 0.84 PR AUC: 0.45

Epoch [49] out of 80

Training loss: 1.101.. Validation loss: 0.624..

AUC: 0.83 PR AUC: 0.45

Epoch [50] out of 80

Training loss: 1.102.. Validation loss: 0.629..

AUC: 0.84 PR AUC: 0.45

Epoch [51] out of 80

Training loss: 1.102.. Validation loss: 0.632..

AUC: 0.84 PR AUC: 0.46

Epoch [52] out of 80

Training loss: 1.101.. Validation loss: 0.634..

AUC: 0.83 PR AUC: 0.45

Epoch [53] out of 80

Training loss: 1.102.. Validation loss: 0.636..

AUC: 0.83 PR AUC: 0.45

Epoch [54] out of 80

Training loss: 1.101.. Validation loss: 0.640..

AUC: 0.83 PR AUC: 0.46

Epoch [55] out of 80

Training loss: 1.101.. Validation loss: 0.644..

AUC: 0.83 PR AUC: 0.45

Epoch [56] out of 80

Training loss: 1.100.. Validation loss: 0.645..

AUC: 0.83 PR AUC: 0.46

Epoch [57] out of 80

Training loss: 1.101.. Validation loss: 0.649..

AUC: 0.82 PR AUC: 0.45

Epoch [58] out of 80

Training loss: 1.100.. Validation loss: 0.649..

AUC: 0.81 PR AUC: 0.45

Epoch [59] out of 80

Training loss: 1.100.. Validation loss: 0.654..

AUC: 0.81 PR AUC: 0.45

Epoch [60] out of 80

Training loss: 1.101.. Validation loss: 0.661..

AUC: 0.81 PR AUC: 0.45

Epoch [61] out of 80

Training loss: 1.100.. Validation loss: 0.659..

AUC: 0.81 PR AUC: 0.45

Epoch [62] out of 80

Training loss: 1.100.. Validation loss: 0.667..

AUC: 0.81 PR AUC: 0.45

Epoch [63] out of 80

Training loss: 1.099.. Validation loss: 0.672..

AUC: 0.80 PR AUC: 0.44

Epoch [64] out of 80

Training loss: 1.100.. Validation loss: 0.670..

AUC: 0.76 PR AUC: 0.43

Epoch [65] out of 80

Training loss: 1.099.. Validation loss: 0.676..

AUC: 0.78 PR AUC: 0.44

Epoch [66] out of 80

Training loss: 1.099.. Validation loss: 0.679..

AUC: 0.80 PR AUC: 0.45

Epoch [67] out of 80

Training loss: 1.098.. Validation loss: 0.685..

AUC: 0.78 PR AUC: 0.44

Epoch [68] out of 80

Training loss: 1.099.. Validation loss: 0.689..

AUC: 0.77 PR AUC: 0.44

Epoch [69] out of 80

Training loss: 1.099.. Validation loss: 0.691..

AUC: 0.75 PR AUC: 0.42

Epoch [70] out of 80

Training loss: 1.099.. Validation loss: 0.698..

AUC: 0.76 PR AUC: 0.43

Epoch [71] out of 80

Training loss: 1.098.. Validation loss: 0.703..

AUC: 0.77 PR AUC: 0.43

Epoch [72] out of 80

Training loss: 1.098.. Validation loss: 0.710..

AUC: 0.77 PR AUC: 0.44

Epoch [73] out of 80

Training loss: 1.099.. Validation loss: 0.714..

AUC: 0.76 PR AUC: 0.43

Epoch [74] out of 80

Training loss: 1.098.. Validation loss: 0.717..

AUC: 0.75 PR AUC: 0.43

Epoch [75] out of 80

Training loss: 1.098.. Validation loss: 0.721..

AUC: 0.75 PR AUC: 0.43

Epoch [76] out of 80

Training loss: 1.097.. Validation loss: 0.727..

AUC: 0.74 PR AUC: 0.43

Epoch [77] out of 80

Training loss: 1.097.. Validation loss: 0.727..

AUC: 0.72 PR AUC: 0.42

Epoch [78] out of 80

Training loss: 1.097.. Validation loss: 0.735..

AUC: 0.72 PR AUC: 0.42

Epoch [79] out of 80

Training loss: 1.098.. Validation loss: 0.744..

AUC: 0.73 PR AUC: 0.43

Epoch [80] out of 80

Training loss: 1.097.. Validation loss: 0.748..

AUC: 0.71 PR AUC: 0.42

Finished Training

starttime = 2021-01-09 00:39:07.924078

endtime = 2021-01-09 01:48:08.132059

Last model

Area Under ROC Curve: 0.60

Area Under PR Curve(AP): 0.72

Brier score : 0.256

Accuracy for Classifier : 0.63

Cut off: 0.4088

[[1428 571]

[1218 1559]]

Best model

Area Under ROC Curve: 0.68

Area Under PR Curve(AP): 0.76

Brier score : 0.237

Accuracy for Classifier : 0.67

Cut off: 0.3783

[[1390 609]

[ 972 1805]]

hypercount: 5

i+Onedir\_2\_lr\_0.001\_nodrop

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, num\_layers=2, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.205.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [2] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [3] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [4] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [5] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [6] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [7] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [8] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [9] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [10] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

Epoch [11] out of 80

Training loss: 1.195.. Validation loss: 0.820..

AUC: 0.50 PR AUC: 0.53

out of patience

Finished Training

starttime = 2021-01-09 01:48:08.620090

endtime = 2021-01-09 02:05:55.109642

Last model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.252

Accuracy for Classifier : 0.42

Cut off: 1.4878

[[1999 0]

[2777 0]]

Best model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.252

Accuracy for Classifier : 0.42

Cut off: 1.4878

[[1999 0]

[2777 0]]

hypercount: 6

i+Onedir\_2\_lr\_0.0001\_nodrop

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, num\_layers=2, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.175.. Validation loss: 0.850..

AUC: 0.72 PR AUC: 0.18

Epoch [2] out of 80

Training loss: 1.132.. Validation loss: 0.806..

AUC: 0.63 PR AUC: 0.21

Epoch [3] out of 80

Training loss: 1.108.. Validation loss: 0.787..

AUC: 0.64 PR AUC: 0.25

Epoch [4] out of 80

Training loss: 1.094.. Validation loss: 0.785..

AUC: 0.65 PR AUC: 0.27

Epoch [5] out of 80

Training loss: 1.086.. Validation loss: 0.784..

AUC: 0.65 PR AUC: 0.28

Epoch [6] out of 80

Training loss: 1.080.. Validation loss: 0.778..

AUC: 0.66 PR AUC: 0.28

Epoch [7] out of 80

Training loss: 1.077.. Validation loss: 0.770..

AUC: 0.67 PR AUC: 0.28

Epoch [8] out of 80

Training loss: 1.074.. Validation loss: 0.759..

AUC: 0.68 PR AUC: 0.29

Epoch [9] out of 80

Training loss: 1.072.. Validation loss: 0.749..

AUC: 0.69 PR AUC: 0.29

Epoch [10] out of 80

Training loss: 1.070.. Validation loss: 0.744..

AUC: 0.70 PR AUC: 0.29

Epoch [11] out of 80

Training loss: 1.069.. Validation loss: 0.743..

AUC: 0.70 PR AUC: 0.29

Epoch [12] out of 80

Training loss: 1.067.. Validation loss: 0.747..

AUC: 0.69 PR AUC: 0.29

Epoch [13] out of 80

Training loss: 1.066.. Validation loss: 0.755..

AUC: 0.68 PR AUC: 0.29

Epoch [14] out of 80

Training loss: 1.064.. Validation loss: 0.764..

AUC: 0.68 PR AUC: 0.29

Epoch [15] out of 80

Training loss: 1.062.. Validation loss: 0.773..

AUC: 0.67 PR AUC: 0.29

Epoch [16] out of 80

Training loss: 1.060.. Validation loss: 0.779..

AUC: 0.67 PR AUC: 0.29

Epoch [17] out of 80

Training loss: 1.059.. Validation loss: 0.786..

AUC: 0.66 PR AUC: 0.29

Epoch [18] out of 80

Training loss: 1.057.. Validation loss: 0.791..

AUC: 0.65 PR AUC: 0.29

Epoch [19] out of 80

Training loss: 1.055.. Validation loss: 0.796..

AUC: 0.65 PR AUC: 0.30

Epoch [20] out of 80

Training loss: 1.054.. Validation loss: 0.803..

AUC: 0.64 PR AUC: 0.30

Epoch [21] out of 80

Training loss: 1.052.. Validation loss: 0.809..

AUC: 0.64 PR AUC: 0.30

Epoch [22] out of 80

Training loss: 1.051.. Validation loss: 0.816..

AUC: 0.64 PR AUC: 0.30

Epoch [23] out of 80

Training loss: 1.049.. Validation loss: 0.821..

AUC: 0.63 PR AUC: 0.30

Epoch [24] out of 80

Training loss: 1.047.. Validation loss: 0.827..

AUC: 0.63 PR AUC: 0.30

Epoch [25] out of 80

Training loss: 1.046.. Validation loss: 0.835..

AUC: 0.62 PR AUC: 0.30

Epoch [26] out of 80

Training loss: 1.044.. Validation loss: 0.846..

AUC: 0.62 PR AUC: 0.30

Epoch [27] out of 80

Training loss: 1.043.. Validation loss: 0.859..

AUC: 0.61 PR AUC: 0.30

Epoch [28] out of 80

Training loss: 1.042.. Validation loss: 0.871..

AUC: 0.61 PR AUC: 0.30

Epoch [29] out of 80

Training loss: 1.040.. Validation loss: 0.884..

AUC: 0.60 PR AUC: 0.30

Epoch [30] out of 80

Training loss: 1.039.. Validation loss: 0.896..

AUC: 0.60 PR AUC: 0.30

Epoch [31] out of 80

Training loss: 1.038.. Validation loss: 0.908..

AUC: 0.60 PR AUC: 0.30

Epoch [32] out of 80

Training loss: 1.037.. Validation loss: 0.922..

AUC: 0.59 PR AUC: 0.30

Epoch [33] out of 80

Training loss: 1.036.. Validation loss: 0.937..

AUC: 0.59 PR AUC: 0.30

Epoch [34] out of 80

Training loss: 1.035.. Validation loss: 0.952..

AUC: 0.59 PR AUC: 0.30

Epoch [35] out of 80

Training loss: 1.034.. Validation loss: 0.965..

AUC: 0.58 PR AUC: 0.30

Epoch [36] out of 80

Training loss: 1.034.. Validation loss: 0.978..

AUC: 0.58 PR AUC: 0.30

Epoch [37] out of 80

Training loss: 1.033.. Validation loss: 0.993..

AUC: 0.57 PR AUC: 0.29

Epoch [38] out of 80

Training loss: 1.032.. Validation loss: 1.009..

AUC: 0.57 PR AUC: 0.29

Epoch [39] out of 80

Training loss: 1.032.. Validation loss: 1.023..

AUC: 0.56 PR AUC: 0.29

Epoch [40] out of 80

Training loss: 1.031.. Validation loss: 1.038..

AUC: 0.56 PR AUC: 0.29

Epoch [41] out of 80

Training loss: 1.031.. Validation loss: 1.053..

AUC: 0.55 PR AUC: 0.29

Epoch [42] out of 80

Training loss: 1.030.. Validation loss: 1.069..

AUC: 0.55 PR AUC: 0.29

Epoch [43] out of 80

Training loss: 1.030.. Validation loss: 1.084..

AUC: 0.54 PR AUC: 0.28

Epoch [44] out of 80

Training loss: 1.029.. Validation loss: 1.100..

AUC: 0.54 PR AUC: 0.28

Epoch [45] out of 80

Training loss: 1.029.. Validation loss: 1.117..

AUC: 0.53 PR AUC: 0.28

Epoch [46] out of 80

Training loss: 1.029.. Validation loss: 1.133..

AUC: 0.53 PR AUC: 0.28

Epoch [47] out of 80

Training loss: 1.028.. Validation loss: 1.148..

AUC: 0.52 PR AUC: 0.28

Epoch [48] out of 80

Training loss: 1.028.. Validation loss: 1.165..

AUC: 0.52 PR AUC: 0.27

Epoch [49] out of 80

Training loss: 1.027.. Validation loss: 1.180..

AUC: 0.51 PR AUC: 0.27

Epoch [50] out of 80

Training loss: 1.027.. Validation loss: 1.194..

AUC: 0.51 PR AUC: 0.27

Epoch [51] out of 80

Training loss: 1.027.. Validation loss: 1.206..

AUC: 0.50 PR AUC: 0.27

Epoch [52] out of 80

Training loss: 1.026.. Validation loss: 1.221..

AUC: 0.50 PR AUC: 0.27

Epoch [53] out of 80

Training loss: 1.026.. Validation loss: 1.229..

AUC: 0.50 PR AUC: 0.27

Epoch [54] out of 80

Training loss: 1.026.. Validation loss: 1.241..

AUC: 0.49 PR AUC: 0.27

Epoch [55] out of 80

Training loss: 1.026.. Validation loss: 1.251..

AUC: 0.49 PR AUC: 0.26

Epoch [56] out of 80

Training loss: 1.025.. Validation loss: 1.260..

AUC: 0.49 PR AUC: 0.26

Epoch [57] out of 80

Training loss: 1.025.. Validation loss: 1.271..

AUC: 0.49 PR AUC: 0.26

Epoch [58] out of 80

Training loss: 1.025.. Validation loss: 1.280..

AUC: 0.49 PR AUC: 0.26

Epoch [59] out of 80

Training loss: 1.024.. Validation loss: 1.288..

AUC: 0.48 PR AUC: 0.26

Epoch [60] out of 80

Training loss: 1.024.. Validation loss: 1.295..

AUC: 0.48 PR AUC: 0.26

Epoch [61] out of 80

Training loss: 1.024.. Validation loss: 1.305..

AUC: 0.48 PR AUC: 0.26

Epoch [62] out of 80

Training loss: 1.024.. Validation loss: 1.313..

AUC: 0.48 PR AUC: 0.26

Epoch [63] out of 80

Training loss: 1.023.. Validation loss: 1.322..

AUC: 0.48 PR AUC: 0.26

Epoch [64] out of 80

Training loss: 1.023.. Validation loss: 1.332..

AUC: 0.47 PR AUC: 0.26

Epoch [65] out of 80

Training loss: 1.023.. Validation loss: 1.339..

AUC: 0.47 PR AUC: 0.25

Epoch [66] out of 80

Training loss: 1.023.. Validation loss: 1.348..

AUC: 0.47 PR AUC: 0.25

Epoch [67] out of 80

Training loss: 1.023.. Validation loss: 1.354..

AUC: 0.47 PR AUC: 0.25

Epoch [68] out of 80

Training loss: 1.022.. Validation loss: 1.363..

AUC: 0.47 PR AUC: 0.25

Epoch [69] out of 80

Training loss: 1.022.. Validation loss: 1.369..

AUC: 0.47 PR AUC: 0.25

Epoch [70] out of 80

Training loss: 1.022.. Validation loss: 1.373..

AUC: 0.47 PR AUC: 0.25

Epoch [71] out of 80

Training loss: 1.022.. Validation loss: 1.377..

AUC: 0.47 PR AUC: 0.25

Epoch [72] out of 80

Training loss: 1.022.. Validation loss: 1.379..

AUC: 0.46 PR AUC: 0.25

Epoch [73] out of 80

Training loss: 1.022.. Validation loss: 1.381..

AUC: 0.46 PR AUC: 0.25

Epoch [74] out of 80

Training loss: 1.021.. Validation loss: 1.384..

AUC: 0.46 PR AUC: 0.25

Epoch [75] out of 80

Training loss: 1.021.. Validation loss: 1.388..

AUC: 0.46 PR AUC: 0.25

Epoch [76] out of 80

Training loss: 1.021.. Validation loss: 1.389..

AUC: 0.46 PR AUC: 0.25

Epoch [77] out of 80

Training loss: 1.021.. Validation loss: 1.391..

AUC: 0.46 PR AUC: 0.25

Epoch [78] out of 80

Training loss: 1.021.. Validation loss: 1.394..

AUC: 0.46 PR AUC: 0.25

Epoch [79] out of 80

Training loss: 1.021.. Validation loss: 1.398..

AUC: 0.46 PR AUC: 0.25

Epoch [80] out of 80

Training loss: 1.021.. Validation loss: 1.401..

AUC: 0.46 PR AUC: 0.25

Finished Training

starttime = 2021-01-09 02:05:55.725923

endtime = 2021-01-09 04:14:01.021301

Last model

Area Under ROC Curve: 0.46

Area Under PR Curve(AP): 0.64

Brier score : 0.317

Accuracy for Classifier : 0.44

Cut off: 0.7863

[[1142 857]

[1824 953]]

Best model

Area Under ROC Curve: 0.64

Area Under PR Curve(AP): 0.75

Brier score : 0.235

Accuracy for Classifier : 0.60

Cut off: 0.5113

[[1790 209]

[1698 1079]]

hypercount: 7

i+Onedir\_2\_lr\_0.001\_drop0.2

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, num\_layers=2, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0.2, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.134.. Validation loss: 0.850..

AUC: 0.66 PR AUC: 0.26

Epoch [2] out of 80

Training loss: 1.111.. Validation loss: 0.781..

AUC: 0.64 PR AUC: 0.28

Epoch [3] out of 80

Training loss: 1.107.. Validation loss: 0.722..

AUC: 0.70 PR AUC: 0.32

Epoch [4] out of 80

Training loss: 1.105.. Validation loss: 0.667..

AUC: 0.80 PR AUC: 0.35

Epoch [5] out of 80

Training loss: 1.103.. Validation loss: 0.661..

AUC: 0.82 PR AUC: 0.36

Epoch [6] out of 80

Training loss: 1.102.. Validation loss: 0.660..

AUC: 0.83 PR AUC: 0.36

Epoch [7] out of 80

Training loss: 1.101.. Validation loss: 0.657..

AUC: 0.80 PR AUC: 0.36

Epoch [8] out of 80

Training loss: 1.100.. Validation loss: 0.655..

AUC: 0.82 PR AUC: 0.36

Epoch [9] out of 80

Training loss: 1.100.. Validation loss: 0.655..

AUC: 0.81 PR AUC: 0.37

Epoch [10] out of 80

Training loss: 1.099.. Validation loss: 0.653..

AUC: 0.80 PR AUC: 0.36

Epoch [11] out of 80

Training loss: 1.097.. Validation loss: 0.648..

AUC: 0.81 PR AUC: 0.36

Epoch [12] out of 80

Training loss: 1.096.. Validation loss: 0.644..

AUC: 0.81 PR AUC: 0.36

Epoch [13] out of 80

Training loss: 1.094.. Validation loss: 0.645..

AUC: 0.81 PR AUC: 0.36

Epoch [14] out of 80

Training loss: 1.093.. Validation loss: 0.645..

AUC: 0.81 PR AUC: 0.36

Epoch [15] out of 80

Training loss: 1.091.. Validation loss: 0.641..

AUC: 0.82 PR AUC: 0.37

Epoch [16] out of 80

Training loss: 1.089.. Validation loss: 0.640..

AUC: 0.80 PR AUC: 0.36

Epoch [17] out of 80

Training loss: 1.089.. Validation loss: 0.638..

AUC: 0.79 PR AUC: 0.36

Epoch [18] out of 80

Training loss: 1.088.. Validation loss: 0.638..

AUC: 0.79 PR AUC: 0.37

Epoch [19] out of 80

Training loss: 1.088.. Validation loss: 0.640..

AUC: 0.81 PR AUC: 0.36

Epoch [20] out of 80

Training loss: 1.085.. Validation loss: 0.634..

AUC: 0.80 PR AUC: 0.36

Epoch [21] out of 80

Training loss: 1.086.. Validation loss: 0.636..

AUC: 0.80 PR AUC: 0.36

Epoch [22] out of 80

Training loss: 1.085.. Validation loss: 0.634..

AUC: 0.81 PR AUC: 0.36

Epoch [23] out of 80

Training loss: 1.084.. Validation loss: 0.632..

AUC: 0.81 PR AUC: 0.36

Epoch [24] out of 80

Training loss: 1.083.. Validation loss: 0.632..

AUC: 0.80 PR AUC: 0.37

Epoch [25] out of 80

Training loss: 1.081.. Validation loss: 0.630..

AUC: 0.82 PR AUC: 0.36

Epoch [26] out of 80

Training loss: 1.082.. Validation loss: 0.631..

AUC: 0.80 PR AUC: 0.36

Epoch [27] out of 80

Training loss: 1.082.. Validation loss: 0.632..

AUC: 0.81 PR AUC: 0.37

Epoch [28] out of 80

Training loss: 1.081.. Validation loss: 0.631..

AUC: 0.83 PR AUC: 0.37

Epoch [29] out of 80

Training loss: 1.079.. Validation loss: 0.629..

AUC: 0.81 PR AUC: 0.36

Epoch [30] out of 80

Training loss: 1.081.. Validation loss: 0.632..

AUC: 0.82 PR AUC: 0.37

Epoch [31] out of 80

Training loss: 1.079.. Validation loss: 0.627..

AUC: 0.81 PR AUC: 0.37

Epoch [32] out of 80

Training loss: 1.080.. Validation loss: 0.633..

AUC: 0.79 PR AUC: 0.36

Epoch [33] out of 80

Training loss: 1.079.. Validation loss: 0.628..

AUC: 0.81 PR AUC: 0.38

Epoch [34] out of 80

Training loss: 1.079.. Validation loss: 0.632..

AUC: 0.81 PR AUC: 0.36

Epoch [35] out of 80

Training loss: 1.077.. Validation loss: 0.625..

AUC: 0.81 PR AUC: 0.36

Epoch [36] out of 80

Training loss: 1.079.. Validation loss: 0.632..

AUC: 0.80 PR AUC: 0.36

Epoch [37] out of 80

Training loss: 1.077.. Validation loss: 0.629..

AUC: 0.79 PR AUC: 0.36

Epoch [38] out of 80

Training loss: 1.076.. Validation loss: 0.622..

AUC: 0.81 PR AUC: 0.37

Epoch [39] out of 80

Training loss: 1.078.. Validation loss: 0.628..

AUC: 0.81 PR AUC: 0.37

Epoch [40] out of 80

Training loss: 1.077.. Validation loss: 0.632..

AUC: 0.80 PR AUC: 0.36

Epoch [41] out of 80

Training loss: 1.077.. Validation loss: 0.629..

AUC: 0.81 PR AUC: 0.36

Epoch [42] out of 80

Training loss: 1.075.. Validation loss: 0.628..

AUC: 0.80 PR AUC: 0.36

Epoch [43] out of 80

Training loss: 1.077.. Validation loss: 0.631..

AUC: 0.81 PR AUC: 0.37

Epoch [44] out of 80

Training loss: 1.076.. Validation loss: 0.632..

AUC: 0.80 PR AUC: 0.35

Epoch [45] out of 80

Training loss: 1.076.. Validation loss: 0.632..

AUC: 0.81 PR AUC: 0.36

Epoch [46] out of 80

Training loss: 1.075.. Validation loss: 0.632..

AUC: 0.81 PR AUC: 0.35

Epoch [47] out of 80

Training loss: 1.077.. Validation loss: 0.631..

AUC: 0.81 PR AUC: 0.36

Epoch [48] out of 80

Training loss: 1.076.. Validation loss: 0.632..

AUC: 0.81 PR AUC: 0.36

Epoch [49] out of 80

Training loss: 1.074.. Validation loss: 0.628..

AUC: 0.79 PR AUC: 0.36

Epoch [50] out of 80

Training loss: 1.075.. Validation loss: 0.630..

AUC: 0.80 PR AUC: 0.36

Epoch [51] out of 80

Training loss: 1.076.. Validation loss: 0.635..

AUC: 0.80 PR AUC: 0.36

Epoch [52] out of 80

Training loss: 1.075.. Validation loss: 0.631..

AUC: 0.81 PR AUC: 0.35

Epoch [53] out of 80

Training loss: 1.075.. Validation loss: 0.630..

AUC: 0.80 PR AUC: 0.36

Epoch [54] out of 80

Training loss: 1.075.. Validation loss: 0.632..

AUC: 0.81 PR AUC: 0.35

Epoch [55] out of 80

Training loss: 1.074.. Validation loss: 0.626..

AUC: 0.81 PR AUC: 0.37

Epoch [56] out of 80

Training loss: 1.073.. Validation loss: 0.624..

AUC: 0.81 PR AUC: 0.36

Epoch [57] out of 80

Training loss: 1.075.. Validation loss: 0.633..

AUC: 0.80 PR AUC: 0.37

Epoch [58] out of 80

Training loss: 1.073.. Validation loss: 0.627..

AUC: 0.79 PR AUC: 0.36

Epoch [59] out of 80

Training loss: 1.073.. Validation loss: 0.624..

AUC: 0.81 PR AUC: 0.36

Epoch [60] out of 80

Training loss: 1.075.. Validation loss: 0.632..

AUC: 0.79 PR AUC: 0.36

Epoch [61] out of 80

Training loss: 1.073.. Validation loss: 0.635..

AUC: 0.70 PR AUC: 0.33

Epoch [62] out of 80

Training loss: 1.074.. Validation loss: 0.628..

AUC: 0.79 PR AUC: 0.36

Epoch [63] out of 80

Training loss: 1.073.. Validation loss: 0.626..

AUC: 0.80 PR AUC: 0.36

Epoch [64] out of 80

Training loss: 1.074.. Validation loss: 0.633..

AUC: 0.79 PR AUC: 0.34

Epoch [65] out of 80

Training loss: 1.074.. Validation loss: 0.631..

AUC: 0.81 PR AUC: 0.35

Epoch [66] out of 80

Training loss: 1.074.. Validation loss: 0.640..

AUC: 0.70 PR AUC: 0.33

Epoch [67] out of 80

Training loss: 1.074.. Validation loss: 0.647..

AUC: 0.69 PR AUC: 0.31

Epoch [68] out of 80

Training loss: 1.073.. Validation loss: 0.630..

AUC: 0.69 PR AUC: 0.33

Epoch [69] out of 80

Training loss: 1.072.. Validation loss: 0.634..

AUC: 0.71 PR AUC: 0.33

Epoch [70] out of 80

Training loss: 1.072.. Validation loss: 0.626..

AUC: 0.80 PR AUC: 0.36

Epoch [71] out of 80

Training loss: 1.073.. Validation loss: 0.627..

AUC: 0.81 PR AUC: 0.36

Epoch [72] out of 80

Training loss: 1.072.. Validation loss: 0.621..

AUC: 0.82 PR AUC: 0.37

Epoch [73] out of 80

Training loss: 1.072.. Validation loss: 0.624..

AUC: 0.80 PR AUC: 0.36

Epoch [74] out of 80

Training loss: 1.072.. Validation loss: 0.624..

AUC: 0.81 PR AUC: 0.35

Epoch [75] out of 80

Training loss: 1.072.. Validation loss: 0.627..

AUC: 0.82 PR AUC: 0.35

Epoch [76] out of 80

Training loss: 1.073.. Validation loss: 0.630..

AUC: 0.80 PR AUC: 0.35

Epoch [77] out of 80

Training loss: 1.071.. Validation loss: 0.627..

AUC: 0.81 PR AUC: 0.36

Epoch [78] out of 80

Training loss: 1.071.. Validation loss: 0.623..

AUC: 0.81 PR AUC: 0.35

Epoch [79] out of 80

Training loss: 1.072.. Validation loss: 0.625..

AUC: 0.82 PR AUC: 0.35

Epoch [80] out of 80

Training loss: 1.071.. Validation loss: 0.623..

AUC: 0.81 PR AUC: 0.34

Finished Training

starttime = 2021-01-09 04:14:01.616651

endtime = 2021-01-09 06:19:41.958171

Last model

Area Under ROC Curve: 0.64

Area Under PR Curve(AP): 0.79

Brier score : 0.242

Accuracy for Classifier : 0.60

Cut off: 0.3734

[[1877 122]

[1804 973]]

Best model

Area Under ROC Curve: 0.66

Area Under PR Curve(AP): 0.81

Brier score : 0.234

Accuracy for Classifier : 0.61

Cut off: 0.3852

[[1863 136]

[1735 1042]]

hypercount: 8

i+Onedir\_2\_lr\_0.0001\_drop0.2

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, num\_layers=2, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0.2, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.333.. Validation loss: 0.708..

AUC: 0.50 PR AUC: 0.53

Epoch [2] out of 80

Training loss: 1.235.. Validation loss: 0.784..

AUC: 0.50 PR AUC: 0.53

Epoch [3] out of 80

Training loss: 1.205.. Validation loss: 0.834..

AUC: 0.50 PR AUC: 0.53

Epoch [4] out of 80

Training loss: 1.199.. Validation loss: 0.858..

AUC: 0.50 PR AUC: 0.53

Epoch [5] out of 80

Training loss: 1.198.. Validation loss: 0.867..

AUC: 0.50 PR AUC: 0.53

Epoch [6] out of 80

Training loss: 1.198.. Validation loss: 0.871..

AUC: 0.50 PR AUC: 0.53

Epoch [7] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [8] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [9] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [10] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [11] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

out of patience

Finished Training

starttime = 2021-01-09 06:19:42.545715

endtime = 2021-01-09 06:36:57.448106

Last model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.246

Accuracy for Classifier : 0.42

Cut off: 1.5258

[[1999 0]

[2777 0]]

Best model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.246

Accuracy for Classifier : 0.42

Cut off: 1.5258

[[1999 0]

[2777 0]]

hypercount: 9

i+Onedir\_3\_lr\_0.001\_nodrop

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, num\_layers=3, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.125.. Validation loss: 0.493..

AUC: 0.88 PR AUC: 0.46

Epoch [2] out of 80

Training loss: 1.077.. Validation loss: 0.468..

AUC: 0.89 PR AUC: 0.41

Epoch [3] out of 80

Training loss: 1.065.. Validation loss: 0.456..

AUC: 0.91 PR AUC: 0.41

Epoch [4] out of 80

Training loss: 1.059.. Validation loss: 0.453..

AUC: 0.92 PR AUC: 0.41

Epoch [5] out of 80

Training loss: 1.055.. Validation loss: 0.449..

AUC: 0.92 PR AUC: 0.41

Epoch [6] out of 80

Training loss: 1.052.. Validation loss: 0.447..

AUC: 0.92 PR AUC: 0.41

Epoch [7] out of 80

Training loss: 1.049.. Validation loss: 0.443..

AUC: 0.92 PR AUC: 0.41

Epoch [8] out of 80

Training loss: 1.046.. Validation loss: 0.438..

AUC: 0.92 PR AUC: 0.42

Epoch [9] out of 80

Training loss: 1.044.. Validation loss: 0.434..

AUC: 0.93 PR AUC: 0.42

Epoch [10] out of 80

Training loss: 1.041.. Validation loss: 0.432..

AUC: 0.92 PR AUC: 0.42

Epoch [11] out of 80

Training loss: 1.038.. Validation loss: 0.429..

AUC: 0.93 PR AUC: 0.42

Epoch [12] out of 80

Training loss: 1.035.. Validation loss: 0.429..

AUC: 0.93 PR AUC: 0.42

Epoch [13] out of 80

Training loss: 1.033.. Validation loss: 0.432..

AUC: 0.93 PR AUC: 0.42

Epoch [14] out of 80

Training loss: 1.031.. Validation loss: 0.433..

AUC: 0.93 PR AUC: 0.42

Epoch [15] out of 80

Training loss: 1.030.. Validation loss: 0.432..

AUC: 0.93 PR AUC: 0.42

Epoch [16] out of 80

Training loss: 1.028.. Validation loss: 0.434..

AUC: 0.92 PR AUC: 0.42

Epoch [17] out of 80

Training loss: 1.027.. Validation loss: 0.431..

AUC: 0.92 PR AUC: 0.42

Epoch [18] out of 80

Training loss: 1.026.. Validation loss: 0.429..

AUC: 0.92 PR AUC: 0.42

Epoch [19] out of 80

Training loss: 1.025.. Validation loss: 0.427..

AUC: 0.92 PR AUC: 0.41

Epoch [20] out of 80

Training loss: 1.024.. Validation loss: 0.425..

AUC: 0.92 PR AUC: 0.41

Epoch [21] out of 80

Training loss: 1.024.. Validation loss: 0.425..

AUC: 0.91 PR AUC: 0.41

Epoch [22] out of 80

Training loss: 1.023.. Validation loss: 0.424..

AUC: 0.91 PR AUC: 0.41

Epoch [23] out of 80

Training loss: 1.022.. Validation loss: 0.423..

AUC: 0.91 PR AUC: 0.41

Epoch [24] out of 80

Training loss: 1.021.. Validation loss: 0.424..

AUC: 0.91 PR AUC: 0.41

Epoch [25] out of 80

Training loss: 1.020.. Validation loss: 0.426..

AUC: 0.90 PR AUC: 0.40

Epoch [26] out of 80

Training loss: 1.020.. Validation loss: 0.426..

AUC: 0.90 PR AUC: 0.40

Epoch [27] out of 80

Training loss: 1.019.. Validation loss: 0.427..

AUC: 0.89 PR AUC: 0.40

Epoch [28] out of 80

Training loss: 1.018.. Validation loss: 0.427..

AUC: 0.89 PR AUC: 0.40

Epoch [29] out of 80

Training loss: 1.018.. Validation loss: 0.427..

AUC: 0.89 PR AUC: 0.40

Epoch [30] out of 80

Training loss: 1.017.. Validation loss: 0.428..

AUC: 0.89 PR AUC: 0.40

Epoch [31] out of 80

Training loss: 1.016.. Validation loss: 0.430..

AUC: 0.88 PR AUC: 0.40

Epoch [32] out of 80

Training loss: 1.016.. Validation loss: 0.436..

AUC: 0.87 PR AUC: 0.40

Epoch [33] out of 80

Training loss: 1.015.. Validation loss: 0.439..

AUC: 0.87 PR AUC: 0.40

Epoch [34] out of 80

Training loss: 1.014.. Validation loss: 0.444..

AUC: 0.86 PR AUC: 0.39

Epoch [35] out of 80

Training loss: 1.014.. Validation loss: 0.451..

AUC: 0.85 PR AUC: 0.39

Epoch [36] out of 80

Training loss: 1.013.. Validation loss: 0.457..

AUC: 0.85 PR AUC: 0.39

Epoch [37] out of 80

Training loss: 1.013.. Validation loss: 0.459..

AUC: 0.85 PR AUC: 0.39

Epoch [38] out of 80

Training loss: 1.012.. Validation loss: 0.463..

AUC: 0.84 PR AUC: 0.39

Epoch [39] out of 80

Training loss: 1.012.. Validation loss: 0.465..

AUC: 0.84 PR AUC: 0.39

Epoch [40] out of 80

Training loss: 1.011.. Validation loss: 0.462..

AUC: 0.84 PR AUC: 0.39

Epoch [41] out of 80

Training loss: 1.010.. Validation loss: 0.462..

AUC: 0.85 PR AUC: 0.39

Epoch [42] out of 80

Training loss: 1.010.. Validation loss: 0.452..

AUC: 0.86 PR AUC: 0.39

Epoch [43] out of 80

Training loss: 1.010.. Validation loss: 0.464..

AUC: 0.84 PR AUC: 0.39

Epoch [44] out of 80

Training loss: 1.009.. Validation loss: 0.458..

AUC: 0.84 PR AUC: 0.39

Epoch [45] out of 80

Training loss: 1.009.. Validation loss: 0.458..

AUC: 0.84 PR AUC: 0.39

Epoch [46] out of 80

Training loss: 1.008.. Validation loss: 0.469..

AUC: 0.83 PR AUC: 0.38

Epoch [47] out of 80

Training loss: 1.008.. Validation loss: 0.461..

AUC: 0.84 PR AUC: 0.39

Epoch [48] out of 80

Training loss: 1.007.. Validation loss: 0.455..

AUC: 0.85 PR AUC: 0.39

Epoch [49] out of 80

Training loss: 1.007.. Validation loss: 0.477..

AUC: 0.82 PR AUC: 0.38

Epoch [50] out of 80

Training loss: 1.007.. Validation loss: 0.454..

AUC: 0.84 PR AUC: 0.39

Epoch [51] out of 80

Training loss: 1.006.. Validation loss: 0.445..

AUC: 0.86 PR AUC: 0.39

Epoch [52] out of 80

Training loss: 1.006.. Validation loss: 0.451..

AUC: 0.85 PR AUC: 0.39

Epoch [53] out of 80

Training loss: 1.005.. Validation loss: 0.440..

AUC: 0.87 PR AUC: 0.39

Epoch [54] out of 80

Training loss: 1.005.. Validation loss: 0.439..

AUC: 0.86 PR AUC: 0.39

Epoch [55] out of 80

Training loss: 1.005.. Validation loss: 0.432..

AUC: 0.88 PR AUC: 0.39

Epoch [56] out of 80

Training loss: 1.005.. Validation loss: 0.436..

AUC: 0.87 PR AUC: 0.39

Epoch [57] out of 80

Training loss: 1.004.. Validation loss: 0.436..

AUC: 0.87 PR AUC: 0.39

Epoch [58] out of 80

Training loss: 1.004.. Validation loss: 0.425..

AUC: 0.89 PR AUC: 0.40

Epoch [59] out of 80

Training loss: 1.003.. Validation loss: 0.424..

AUC: 0.89 PR AUC: 0.40

Epoch [60] out of 80

Training loss: 1.003.. Validation loss: 0.430..

AUC: 0.88 PR AUC: 0.40

Epoch [61] out of 80

Training loss: 1.003.. Validation loss: 0.427..

AUC: 0.89 PR AUC: 0.40

Epoch [62] out of 80

Training loss: 1.003.. Validation loss: 0.425..

AUC: 0.89 PR AUC: 0.39

Epoch [63] out of 80

Training loss: 1.003.. Validation loss: 0.421..

AUC: 0.90 PR AUC: 0.40

Epoch [64] out of 80

Training loss: 1.002.. Validation loss: 0.423..

AUC: 0.89 PR AUC: 0.40

Epoch [65] out of 80

Training loss: 1.002.. Validation loss: 0.423..

AUC: 0.89 PR AUC: 0.40

Epoch [66] out of 80

Training loss: 1.002.. Validation loss: 0.422..

AUC: 0.89 PR AUC: 0.40

Epoch [67] out of 80

Training loss: 1.002.. Validation loss: 0.424..

AUC: 0.89 PR AUC: 0.40

Epoch [68] out of 80

Training loss: 1.001.. Validation loss: 0.424..

AUC: 0.89 PR AUC: 0.40

Epoch [69] out of 80

Training loss: 1.001.. Validation loss: 0.422..

AUC: 0.89 PR AUC: 0.40

Epoch [70] out of 80

Training loss: 1.001.. Validation loss: 0.424..

AUC: 0.89 PR AUC: 0.40

Epoch [71] out of 80

Training loss: 1.001.. Validation loss: 0.422..

AUC: 0.89 PR AUC: 0.40

Epoch [72] out of 80

Training loss: 1.001.. Validation loss: 0.421..

AUC: 0.89 PR AUC: 0.40

Epoch [73] out of 80

Training loss: 1.001.. Validation loss: 0.422..

AUC: 0.89 PR AUC: 0.40

Epoch [74] out of 80

Training loss: 1.000.. Validation loss: 0.423..

AUC: 0.89 PR AUC: 0.40

Epoch [75] out of 80

Training loss: 1.000.. Validation loss: 0.424..

AUC: 0.88 PR AUC: 0.40

Epoch [76] out of 80

Training loss: 1.000.. Validation loss: 0.422..

AUC: 0.89 PR AUC: 0.40

Epoch [77] out of 80

Training loss: 1.000.. Validation loss: 0.425..

AUC: 0.88 PR AUC: 0.40

Epoch [78] out of 80

Training loss: 1.000.. Validation loss: 0.424..

AUC: 0.89 PR AUC: 0.40

Epoch [79] out of 80

Training loss: 0.999.. Validation loss: 0.423..

AUC: 0.89 PR AUC: 0.40

Epoch [80] out of 80

Training loss: 0.999.. Validation loss: 0.420..

AUC: 0.90 PR AUC: 0.40

Finished Training

starttime = 2021-01-09 06:36:58.098260

endtime = 2021-01-09 09:42:36.435723

Last model

Area Under ROC Curve: 0.76

Area Under PR Curve(AP): 0.83

Brier score : 0.286

Accuracy for Classifier : 0.70

Cut off: 0.1601

[[1576 423]

[1026 1751]]

Best model

Area Under ROC Curve: 0.77

Area Under PR Curve(AP): 0.84

Brier score : 0.262

Accuracy for Classifier : 0.71

Cut off: 0.2132

[[1755 244]

[1135 1642]]

hypercount: 10

i+Onedir\_3\_lr\_0.0001\_nodrop

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, num\_layers=3, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.222.. Validation loss: 0.905..

AUC: 0.12 PR AUC: 0.03

Epoch [2] out of 80

Training loss: 1.198.. Validation loss: 0.867..

AUC: 0.55 PR AUC: 0.18

Epoch [3] out of 80

Training loss: 1.192.. Validation loss: 0.873..

AUC: 0.52 PR AUC: 0.17

Epoch [4] out of 80

Training loss: 1.167.. Validation loss: 0.762..

AUC: 0.78 PR AUC: 0.30

Epoch [5] out of 80

Training loss: 1.146.. Validation loss: 0.685..

AUC: 0.85 PR AUC: 0.35

Epoch [6] out of 80

Training loss: 1.131.. Validation loss: 0.654..

AUC: 0.72 PR AUC: 0.34

Epoch [7] out of 80

Training loss: 1.119.. Validation loss: 0.636..

AUC: 0.67 PR AUC: 0.34

Epoch [8] out of 80

Training loss: 1.108.. Validation loss: 0.630..

AUC: 0.67 PR AUC: 0.34

Epoch [9] out of 80

Training loss: 1.099.. Validation loss: 0.629..

AUC: 0.67 PR AUC: 0.34

Epoch [10] out of 80

Training loss: 1.091.. Validation loss: 0.629..

AUC: 0.67 PR AUC: 0.34

Epoch [11] out of 80

Training loss: 1.086.. Validation loss: 0.629..

AUC: 0.67 PR AUC: 0.34

Epoch [12] out of 80

Training loss: 1.082.. Validation loss: 0.630..

AUC: 0.67 PR AUC: 0.34

Epoch [13] out of 80

Training loss: 1.079.. Validation loss: 0.631..

AUC: 0.67 PR AUC: 0.33

Epoch [14] out of 80

Training loss: 1.076.. Validation loss: 0.633..

AUC: 0.67 PR AUC: 0.33

Epoch [15] out of 80

Training loss: 1.074.. Validation loss: 0.635..

AUC: 0.67 PR AUC: 0.32

Epoch [16] out of 80

Training loss: 1.073.. Validation loss: 0.636..

AUC: 0.66 PR AUC: 0.32

Epoch [17] out of 80

Training loss: 1.071.. Validation loss: 0.637..

AUC: 0.66 PR AUC: 0.32

Epoch [18] out of 80

Training loss: 1.070.. Validation loss: 0.638..

AUC: 0.66 PR AUC: 0.32

Epoch [19] out of 80

Training loss: 1.069.. Validation loss: 0.638..

AUC: 0.66 PR AUC: 0.32

Epoch [20] out of 80

Training loss: 1.068.. Validation loss: 0.637..

AUC: 0.66 PR AUC: 0.32

Epoch [21] out of 80

Training loss: 1.068.. Validation loss: 0.636..

AUC: 0.66 PR AUC: 0.32

Epoch [22] out of 80

Training loss: 1.067.. Validation loss: 0.636..

AUC: 0.66 PR AUC: 0.32

Epoch [23] out of 80

Training loss: 1.066.. Validation loss: 0.635..

AUC: 0.66 PR AUC: 0.32

Epoch [24] out of 80

Training loss: 1.066.. Validation loss: 0.634..

AUC: 0.66 PR AUC: 0.32

Epoch [25] out of 80

Training loss: 1.065.. Validation loss: 0.632..

AUC: 0.66 PR AUC: 0.32

Epoch [26] out of 80

Training loss: 1.064.. Validation loss: 0.630..

AUC: 0.67 PR AUC: 0.32

Epoch [27] out of 80

Training loss: 1.064.. Validation loss: 0.628..

AUC: 0.67 PR AUC: 0.32

Epoch [28] out of 80

Training loss: 1.063.. Validation loss: 0.626..

AUC: 0.67 PR AUC: 0.32

Epoch [29] out of 80

Training loss: 1.063.. Validation loss: 0.624..

AUC: 0.67 PR AUC: 0.32

Epoch [30] out of 80

Training loss: 1.062.. Validation loss: 0.622..

AUC: 0.67 PR AUC: 0.32

Epoch [31] out of 80

Training loss: 1.061.. Validation loss: 0.620..

AUC: 0.67 PR AUC: 0.32

Epoch [32] out of 80

Training loss: 1.061.. Validation loss: 0.619..

AUC: 0.67 PR AUC: 0.32

Epoch [33] out of 80

Training loss: 1.060.. Validation loss: 0.618..

AUC: 0.67 PR AUC: 0.32

Epoch [34] out of 80

Training loss: 1.059.. Validation loss: 0.618..

AUC: 0.67 PR AUC: 0.32

Epoch [35] out of 80

Training loss: 1.059.. Validation loss: 0.619..

AUC: 0.67 PR AUC: 0.32

Epoch [36] out of 80

Training loss: 1.058.. Validation loss: 0.621..

AUC: 0.67 PR AUC: 0.32

Epoch [37] out of 80

Training loss: 1.058.. Validation loss: 0.626..

AUC: 0.66 PR AUC: 0.32

Epoch [38] out of 80

Training loss: 1.057.. Validation loss: 0.634..

AUC: 0.65 PR AUC: 0.31

Epoch [39] out of 80

Training loss: 1.056.. Validation loss: 0.644..

AUC: 0.65 PR AUC: 0.31

Epoch [40] out of 80

Training loss: 1.056.. Validation loss: 0.657..

AUC: 0.63 PR AUC: 0.31

Epoch [41] out of 80

Training loss: 1.055.. Validation loss: 0.670..

AUC: 0.62 PR AUC: 0.30

Epoch [42] out of 80

Training loss: 1.055.. Validation loss: 0.685..

AUC: 0.61 PR AUC: 0.30

Epoch [43] out of 80

Training loss: 1.054.. Validation loss: 0.702..

AUC: 0.60 PR AUC: 0.29

Epoch [44] out of 80

Training loss: 1.053.. Validation loss: 0.719..

AUC: 0.58 PR AUC: 0.29

Epoch [45] out of 80

Training loss: 1.053.. Validation loss: 0.738..

AUC: 0.57 PR AUC: 0.28

Epoch [46] out of 80

Training loss: 1.052.. Validation loss: 0.758..

AUC: 0.56 PR AUC: 0.28

Epoch [47] out of 80

Training loss: 1.052.. Validation loss: 0.777..

AUC: 0.55 PR AUC: 0.28

Epoch [48] out of 80

Training loss: 1.051.. Validation loss: 0.793..

AUC: 0.55 PR AUC: 0.27

Epoch [49] out of 80

Training loss: 1.050.. Validation loss: 0.806..

AUC: 0.54 PR AUC: 0.27

Epoch [50] out of 80

Training loss: 1.049.. Validation loss: 0.815..

AUC: 0.54 PR AUC: 0.27

Epoch [51] out of 80

Training loss: 1.049.. Validation loss: 0.822..

AUC: 0.54 PR AUC: 0.27

Epoch [52] out of 80

Training loss: 1.048.. Validation loss: 0.829..

AUC: 0.53 PR AUC: 0.27

Epoch [53] out of 80

Training loss: 1.048.. Validation loss: 0.837..

AUC: 0.53 PR AUC: 0.27

Epoch [54] out of 80

Training loss: 1.047.. Validation loss: 0.844..

AUC: 0.53 PR AUC: 0.27

Epoch [55] out of 80

Training loss: 1.047.. Validation loss: 0.853..

AUC: 0.53 PR AUC: 0.27

Epoch [56] out of 80

Training loss: 1.046.. Validation loss: 0.861..

AUC: 0.52 PR AUC: 0.27

Epoch [57] out of 80

Training loss: 1.046.. Validation loss: 0.870..

AUC: 0.52 PR AUC: 0.27

Epoch [58] out of 80

Training loss: 1.046.. Validation loss: 0.878..

AUC: 0.52 PR AUC: 0.27

Epoch [59] out of 80

Training loss: 1.045.. Validation loss: 0.886..

AUC: 0.51 PR AUC: 0.27

Epoch [60] out of 80

Training loss: 1.045.. Validation loss: 0.894..

AUC: 0.51 PR AUC: 0.26

Epoch [61] out of 80

Training loss: 1.045.. Validation loss: 0.900..

AUC: 0.51 PR AUC: 0.26

Epoch [62] out of 80

Training loss: 1.044.. Validation loss: 0.906..

AUC: 0.51 PR AUC: 0.26

Epoch [63] out of 80

Training loss: 1.044.. Validation loss: 0.912..

AUC: 0.51 PR AUC: 0.26

Epoch [64] out of 80

Training loss: 1.044.. Validation loss: 0.918..

AUC: 0.50 PR AUC: 0.26

Epoch [65] out of 80

Training loss: 1.043.. Validation loss: 0.923..

AUC: 0.50 PR AUC: 0.26

Epoch [66] out of 80

Training loss: 1.043.. Validation loss: 0.929..

AUC: 0.50 PR AUC: 0.26

Epoch [67] out of 80

Training loss: 1.042.. Validation loss: 0.933..

AUC: 0.50 PR AUC: 0.26

Epoch [68] out of 80

Training loss: 1.042.. Validation loss: 0.938..

AUC: 0.50 PR AUC: 0.26

Epoch [69] out of 80

Training loss: 1.042.. Validation loss: 0.943..

AUC: 0.50 PR AUC: 0.26

Epoch [70] out of 80

Training loss: 1.041.. Validation loss: 0.948..

AUC: 0.49 PR AUC: 0.26

Epoch [71] out of 80

Training loss: 1.041.. Validation loss: 0.954..

AUC: 0.49 PR AUC: 0.26

Epoch [72] out of 80

Training loss: 1.040.. Validation loss: 0.957..

AUC: 0.49 PR AUC: 0.26

Epoch [73] out of 80

Training loss: 1.040.. Validation loss: 0.961..

AUC: 0.49 PR AUC: 0.26

Epoch [74] out of 80

Training loss: 1.040.. Validation loss: 0.965..

AUC: 0.49 PR AUC: 0.26

Epoch [75] out of 80

Training loss: 1.039.. Validation loss: 0.968..

AUC: 0.49 PR AUC: 0.26

Epoch [76] out of 80

Training loss: 1.039.. Validation loss: 0.971..

AUC: 0.49 PR AUC: 0.26

Epoch [77] out of 80

Training loss: 1.038.. Validation loss: 0.973..

AUC: 0.49 PR AUC: 0.26

Epoch [78] out of 80

Training loss: 1.038.. Validation loss: 0.976..

AUC: 0.49 PR AUC: 0.26

Epoch [79] out of 80

Training loss: 1.038.. Validation loss: 0.979..

AUC: 0.49 PR AUC: 0.26

Epoch [80] out of 80

Training loss: 1.037.. Validation loss: 0.981..

AUC: 0.49 PR AUC: 0.26

Finished Training

starttime = 2021-01-09 09:42:37.131698

endtime = 2021-01-09 12:49:17.647725

Last model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.67

Brier score : 0.281

Accuracy for Classifier : 0.50

Cut off: 0.6199

[[1589 410]

[1975 802]]

Best model

Area Under ROC Curve: 0.71

Area Under PR Curve(AP): 0.77

Brier score : 0.250

Accuracy for Classifier : 0.69

Cut off: 0.3881

[[1530 469]

[1003 1774]]

hypercount: 11

i+Onedir\_3\_lr\_0.001\_drop0.2

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, num\_layers=3, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0.2, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.146.. Validation loss: 0.691..

AUC: 0.79 PR AUC: 0.27

Epoch [2] out of 80

Training loss: 1.114.. Validation loss: 0.674..

AUC: 0.68 PR AUC: 0.28

Epoch [3] out of 80

Training loss: 1.109.. Validation loss: 0.666..

AUC: 0.80 PR AUC: 0.33

Epoch [4] out of 80

Training loss: 1.106.. Validation loss: 0.664..

AUC: 0.83 PR AUC: 0.35

Epoch [5] out of 80

Training loss: 1.103.. Validation loss: 0.659..

AUC: 0.83 PR AUC: 0.35

Epoch [6] out of 80

Training loss: 1.102.. Validation loss: 0.658..

AUC: 0.82 PR AUC: 0.36

Epoch [7] out of 80

Training loss: 1.099.. Validation loss: 0.661..

AUC: 0.80 PR AUC: 0.35

Epoch [8] out of 80

Training loss: 1.098.. Validation loss: 0.652..

AUC: 0.79 PR AUC: 0.36

Epoch [9] out of 80

Training loss: 1.095.. Validation loss: 0.643..

AUC: 0.83 PR AUC: 0.37

Epoch [10] out of 80

Training loss: 1.093.. Validation loss: 0.639..

AUC: 0.85 PR AUC: 0.38

Epoch [11] out of 80

Training loss: 1.092.. Validation loss: 0.639..

AUC: 0.80 PR AUC: 0.37

Epoch [12] out of 80

Training loss: 1.090.. Validation loss: 0.638..

AUC: 0.83 PR AUC: 0.38

Epoch [13] out of 80

Training loss: 1.090.. Validation loss: 0.637..

AUC: 0.82 PR AUC: 0.38

Epoch [14] out of 80

Training loss: 1.089.. Validation loss: 0.634..

AUC: 0.83 PR AUC: 0.38

Epoch [15] out of 80

Training loss: 1.088.. Validation loss: 0.633..

AUC: 0.79 PR AUC: 0.38

Epoch [16] out of 80

Training loss: 1.087.. Validation loss: 0.635..

AUC: 0.83 PR AUC: 0.37

Epoch [17] out of 80

Training loss: 1.087.. Validation loss: 0.633..

AUC: 0.83 PR AUC: 0.37

Epoch [18] out of 80

Training loss: 1.084.. Validation loss: 0.632..

AUC: 0.84 PR AUC: 0.38

Epoch [19] out of 80

Training loss: 1.087.. Validation loss: 0.636..

AUC: 0.83 PR AUC: 0.38

Epoch [20] out of 80

Training loss: 1.084.. Validation loss: 0.629..

AUC: 0.81 PR AUC: 0.38

Epoch [21] out of 80

Training loss: 1.083.. Validation loss: 0.631..

AUC: 0.80 PR AUC: 0.38

Epoch [22] out of 80

Training loss: 1.084.. Validation loss: 0.631..

AUC: 0.80 PR AUC: 0.38

Epoch [23] out of 80

Training loss: 1.084.. Validation loss: 0.629..

AUC: 0.85 PR AUC: 0.39

Epoch [24] out of 80

Training loss: 1.083.. Validation loss: 0.627..

AUC: 0.82 PR AUC: 0.39

Epoch [25] out of 80

Training loss: 1.083.. Validation loss: 0.628..

AUC: 0.81 PR AUC: 0.38

Epoch [26] out of 80

Training loss: 1.084.. Validation loss: 0.629..

AUC: 0.80 PR AUC: 0.38

Epoch [27] out of 80

Training loss: 1.081.. Validation loss: 0.625..

AUC: 0.81 PR AUC: 0.39

Epoch [28] out of 80

Training loss: 1.082.. Validation loss: 0.624..

AUC: 0.81 PR AUC: 0.39

Epoch [29] out of 80

Training loss: 1.081.. Validation loss: 0.628..

AUC: 0.81 PR AUC: 0.39

Epoch [30] out of 80

Training loss: 1.081.. Validation loss: 0.619..

AUC: 0.81 PR AUC: 0.39

Epoch [31] out of 80

Training loss: 1.081.. Validation loss: 0.621..

AUC: 0.83 PR AUC: 0.40

Epoch [32] out of 80

Training loss: 1.080.. Validation loss: 0.622..

AUC: 0.82 PR AUC: 0.40

Epoch [33] out of 80

Training loss: 1.081.. Validation loss: 0.624..

AUC: 0.81 PR AUC: 0.39

Epoch [34] out of 80

Training loss: 1.081.. Validation loss: 0.624..

AUC: 0.81 PR AUC: 0.40

Epoch [35] out of 80

Training loss: 1.080.. Validation loss: 0.624..

AUC: 0.81 PR AUC: 0.40

Epoch [36] out of 80

Training loss: 1.079.. Validation loss: 0.621..

AUC: 0.81 PR AUC: 0.40

Epoch [37] out of 80

Training loss: 1.079.. Validation loss: 0.621..

AUC: 0.83 PR AUC: 0.39

Epoch [38] out of 80

Training loss: 1.080.. Validation loss: 0.622..

AUC: 0.81 PR AUC: 0.39

Epoch [39] out of 80

Training loss: 1.080.. Validation loss: 0.624..

AUC: 0.80 PR AUC: 0.39

Epoch [40] out of 80

Training loss: 1.080.. Validation loss: 0.626..

AUC: 0.79 PR AUC: 0.39

Epoch [41] out of 80

Training loss: 1.079.. Validation loss: 0.624..

AUC: 0.81 PR AUC: 0.39

Epoch [42] out of 80

Training loss: 1.078.. Validation loss: 0.622..

AUC: 0.82 PR AUC: 0.39

Epoch [43] out of 80

Training loss: 1.078.. Validation loss: 0.619..

AUC: 0.85 PR AUC: 0.40

Epoch [44] out of 80

Training loss: 1.079.. Validation loss: 0.623..

AUC: 0.83 PR AUC: 0.40

Epoch [45] out of 80

Training loss: 1.078.. Validation loss: 0.619..

AUC: 0.83 PR AUC: 0.40

Epoch [46] out of 80

Training loss: 1.078.. Validation loss: 0.624..

AUC: 0.84 PR AUC: 0.40

Epoch [47] out of 80

Training loss: 1.078.. Validation loss: 0.618..

AUC: 0.82 PR AUC: 0.40

Epoch [48] out of 80

Training loss: 1.077.. Validation loss: 0.620..

AUC: 0.82 PR AUC: 0.40

Epoch [49] out of 80

Training loss: 1.077.. Validation loss: 0.619..

AUC: 0.81 PR AUC: 0.39

Epoch [50] out of 80

Training loss: 1.077.. Validation loss: 0.622..

AUC: 0.83 PR AUC: 0.40

Epoch [51] out of 80

Training loss: 1.079.. Validation loss: 0.621..

AUC: 0.83 PR AUC: 0.40

Epoch [52] out of 80

Training loss: 1.077.. Validation loss: 0.620..

AUC: 0.83 PR AUC: 0.40

Epoch [53] out of 80

Training loss: 1.077.. Validation loss: 0.621..

AUC: 0.83 PR AUC: 0.39

Epoch [54] out of 80

Training loss: 1.078.. Validation loss: 0.620..

AUC: 0.81 PR AUC: 0.41

Epoch [55] out of 80

Training loss: 1.077.. Validation loss: 0.617..

AUC: 0.83 PR AUC: 0.41

Epoch [56] out of 80

Training loss: 1.076.. Validation loss: 0.623..

AUC: 0.84 PR AUC: 0.40

Epoch [57] out of 80

Training loss: 1.077.. Validation loss: 0.624..

AUC: 0.81 PR AUC: 0.39

Epoch [58] out of 80

Training loss: 1.078.. Validation loss: 0.621..

AUC: 0.84 PR AUC: 0.40

Epoch [59] out of 80

Training loss: 1.076.. Validation loss: 0.623..

AUC: 0.81 PR AUC: 0.38

Epoch [60] out of 80

Training loss: 1.077.. Validation loss: 0.621..

AUC: 0.83 PR AUC: 0.41

Epoch [61] out of 80

Training loss: 1.078.. Validation loss: 0.625..

AUC: 0.81 PR AUC: 0.40

Epoch [62] out of 80

Training loss: 1.076.. Validation loss: 0.622..

AUC: 0.82 PR AUC: 0.40

Epoch [63] out of 80

Training loss: 1.075.. Validation loss: 0.618..

AUC: 0.82 PR AUC: 0.40

Epoch [64] out of 80

Training loss: 1.075.. Validation loss: 0.621..

AUC: 0.82 PR AUC: 0.40

Epoch [65] out of 80

Training loss: 1.078.. Validation loss: 0.627..

AUC: 0.82 PR AUC: 0.39

Epoch [66] out of 80

Training loss: 1.077.. Validation loss: 0.621..

AUC: 0.83 PR AUC: 0.39

Epoch [67] out of 80

Training loss: 1.076.. Validation loss: 0.621..

AUC: 0.81 PR AUC: 0.39

Epoch [68] out of 80

Training loss: 1.075.. Validation loss: 0.620..

AUC: 0.81 PR AUC: 0.39

Epoch [69] out of 80

Training loss: 1.076.. Validation loss: 0.625..

AUC: 0.81 PR AUC: 0.38

Epoch [70] out of 80

Training loss: 1.076.. Validation loss: 0.622..

AUC: 0.81 PR AUC: 0.39

Epoch [71] out of 80

Training loss: 1.074.. Validation loss: 0.617..

AUC: 0.82 PR AUC: 0.40

Epoch [72] out of 80

Training loss: 1.073.. Validation loss: 0.613..

AUC: 0.82 PR AUC: 0.39

Epoch [73] out of 80

Training loss: 1.075.. Validation loss: 0.619..

AUC: 0.81 PR AUC: 0.40

Epoch [74] out of 80

Training loss: 1.074.. Validation loss: 0.616..

AUC: 0.84 PR AUC: 0.40

Epoch [75] out of 80

Training loss: 1.074.. Validation loss: 0.616..

AUC: 0.82 PR AUC: 0.40

Epoch [76] out of 80

Training loss: 1.074.. Validation loss: 0.619..

AUC: 0.82 PR AUC: 0.40

Epoch [77] out of 80

Training loss: 1.076.. Validation loss: 0.620..

AUC: 0.80 PR AUC: 0.40

Epoch [78] out of 80

Training loss: 1.074.. Validation loss: 0.619..

AUC: 0.82 PR AUC: 0.39

Epoch [79] out of 80

Training loss: 1.076.. Validation loss: 0.621..

AUC: 0.80 PR AUC: 0.38

Epoch [80] out of 80

Training loss: 1.075.. Validation loss: 0.622..

AUC: 0.80 PR AUC: 0.40

Finished Training

starttime = 2021-01-09 12:49:18.358178

endtime = 2021-01-09 15:53:49.558362

Last model

Area Under ROC Curve: 0.64

Area Under PR Curve(AP): 0.82

Brier score : 0.241

Accuracy for Classifier : 0.58

Cut off: 0.3709

[[1921 78]

[1907 870]]

Best model

Area Under ROC Curve: 0.68

Area Under PR Curve(AP): 0.85

Brier score : 0.227

Accuracy for Classifier : 0.64

Cut off: 0.3634

[[1938 61]

[1678 1099]]

hypercount: 12

i+Onedir\_3\_lr\_0.0001\_drop0.2

Net(

(fc1): Linear(in\_features=35, out\_features=35, bias=True)

(fc2): LSTM(35, 1, num\_layers=3, batch\_first=True)

(combination\_layer): Linear(in\_features=1, out\_features=1, bias=True)

(projection): Linear(in\_features=1, out\_features=1, bias=True)

(dropout\_layer): Dropout(p=0.2, inplace=False)

(relu): ReLU()

)

Epoch [1] out of 80

Training loss: 1.279.. Validation loss: 1.039..

AUC: 0.50 PR AUC: 0.53

Epoch [2] out of 80

Training loss: 1.211.. Validation loss: 0.929..

AUC: 0.50 PR AUC: 0.53

Epoch [3] out of 80

Training loss: 1.199.. Validation loss: 0.893..

AUC: 0.50 PR AUC: 0.53

Epoch [4] out of 80

Training loss: 1.198.. Validation loss: 0.881..

AUC: 0.50 PR AUC: 0.53

Epoch [5] out of 80

Training loss: 1.198.. Validation loss: 0.876..

AUC: 0.50 PR AUC: 0.53

Epoch [6] out of 80

Training loss: 1.198.. Validation loss: 0.874..

AUC: 0.50 PR AUC: 0.53

Epoch [7] out of 80

Training loss: 1.198.. Validation loss: 0.874..

AUC: 0.50 PR AUC: 0.53

Epoch [8] out of 80

Training loss: 1.198.. Validation loss: 0.874..

AUC: 0.50 PR AUC: 0.53

Epoch [9] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [10] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

Epoch [11] out of 80

Training loss: 1.198.. Validation loss: 0.873..

AUC: 0.50 PR AUC: 0.53

out of patience

Finished Training

starttime = 2021-01-09 15:53:50.247841

endtime = 2021-01-09 16:19:14.117593

Last model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.246

Accuracy for Classifier : 0.42

Cut off: 1.5258

[[1999 0]

[2777 0]]

Best model

Area Under ROC Curve: 0.50

Area Under PR Curve(AP): 0.79

Brier score : 0.246

Accuracy for Classifier : 0.42

Cut off: 1.5258

[[1999 0]

[2777 0]]