Found 539 images belonging to 2 classes.

Found 207 images belonging to 2 classes.

WARNING:tensorflow:sample\_weight modes were coerced from

...

to

['...']

WARNING:tensorflow:sample\_weight modes were coerced from

...

to

['...']

Train for 67 steps, validate for 25 steps

Epoch 1/30

66/67 [============================>.] - ETA: 0s - loss: 0.7008 - accuracy: 0.5296 - AUC: 0.5549

Epoch 00001: val\_accuracy improved from -inf to 0.52500, saving model to weights-improvement-01-0.52.hdf5

67/67 [==============================] - 56s 843ms/step - loss: 0.7007 - accuracy: 0.5292 - AUC: 0.5543 - val\_loss: 0.6930 - val\_accuracy: 0.5250 - val\_AUC: 0.5125

Epoch 2/30

66/67 [============================>.] - ETA: 0s - loss: 0.6905 - accuracy: 0.5010 - AUC: 0.5357

Epoch 00002: val\_accuracy did not improve from 0.52500

67/67 [==============================] - 54s 806ms/step - loss: 0.6903 - accuracy: 0.5028 - AUC: 0.5383 - val\_loss: 0.6857 - val\_accuracy: 0.4900 - val\_AUC: 0.5365

Epoch 3/30

66/67 [============================>.] - ETA: 0s - loss: 0.6709 - accuracy: 0.5430 - AUC: 0.5704

Epoch 00003: val\_accuracy did not improve from 0.52500

67/67 [==============================] - 54s 805ms/step - loss: 0.6677 - accuracy: 0.5461 - AUC: 0.5766 - val\_loss: 0.6616 - val\_accuracy: 0.5050 - val\_AUC: 0.5885

Epoch 4/30

66/67 [============================>.] - ETA: 0s - loss: 0.6649 - accuracy: 0.5679 - AUC: 0.6064

Epoch 00004: val\_accuracy improved from 0.52500 to 0.60000, saving model to weights-improvement-04-0.60.hdf5

67/67 [==============================] - 54s 811ms/step - loss: 0.6643 - accuracy: 0.5706 - AUC: 0.6071 - val\_loss: 0.6859 - val\_accuracy: 0.6000 - val\_AUC: 0.5980

Epoch 5/30

66/67 [============================>.] - ETA: 0s - loss: 0.6557 - accuracy: 0.5755 - AUC: 0.6199

Epoch 00005: val\_accuracy did not improve from 0.60000

67/67 [==============================] - 55s 821ms/step - loss: 0.6551 - accuracy: 0.5744 - AUC: 0.6212 - val\_loss: 0.6416 - val\_accuracy: 0.5350 - val\_AUC: 0.6107

Epoch 6/30

66/67 [============================>.] - ETA: 0s - loss: 0.6529 - accuracy: 0.5545 - AUC: 0.6067

Epoch 00006: val\_accuracy improved from 0.60000 to 0.65000, saving model to weights-improvement-06-0.65.hdf5

67/67 [==============================] - 55s 819ms/step - loss: 0.6509 - accuracy: 0.5537 - AUC: 0.6085 - val\_loss: 0.6377 - val\_accuracy: 0.6500 - val\_AUC: 0.6751

Epoch 7/30

66/67 [============================>.] - ETA: 0s - loss: 0.6360 - accuracy: 0.5832 - AUC: 0.6415

Epoch 00007: val\_accuracy did not improve from 0.65000

67/67 [==============================] - 55s 815ms/step - loss: 0.6358 - accuracy: 0.5800 - AUC: 0.6394 - val\_loss: 0.6808 - val\_accuracy: 0.6250 - val\_AUC: 0.6565

Epoch 8/30

66/67 [============================>.] - ETA: 0s - loss: 0.6482 - accuracy: 0.5774 - AUC: 0.6148

Epoch 00008: val\_accuracy did not improve from 0.65000

67/67 [==============================] - 55s 824ms/step - loss: 0.6470 - accuracy: 0.5819 - AUC: 0.6197 - val\_loss: 0.6610 - val\_accuracy: 0.6250 - val\_AUC: 0.6556

Epoch 9/30

66/67 [============================>.] - ETA: 0s - loss: 0.6307 - accuracy: 0.6157 - AUC: 0.6556

Epoch 00009: val\_accuracy did not improve from 0.65000

67/67 [==============================] - 55s 826ms/step - loss: 0.6308 - accuracy: 0.6158 - AUC: 0.6564 - val\_loss: 0.6293 - val\_accuracy: 0.6200 - val\_AUC: 0.6868

Epoch 10/30

66/67 [============================>.] - ETA: 0s - loss: 0.6383 - accuracy: 0.6176 - AUC: 0.6670

Epoch 00010: val\_accuracy improved from 0.65000 to 0.65500, saving model to weights-improvement-10-0.65.hdf5

67/67 [==============================] - 57s 846ms/step - loss: 0.6404 - accuracy: 0.6139 - AUC: 0.6631 - val\_loss: 0.6381 - val\_accuracy: 0.6550 - val\_AUC: 0.6843

Epoch 11/30

66/67 [============================>.] - ETA: 0s - loss: 0.6320 - accuracy: 0.6310 - AUC: 0.6760

Epoch 00011: val\_accuracy did not improve from 0.65500

67/67 [==============================] - 56s 835ms/step - loss: 0.6331 - accuracy: 0.6328 - AUC: 0.6753 - val\_loss: 0.6611 - val\_accuracy: 0.6350 - val\_AUC: 0.6572

Epoch 12/30

66/67 [============================>.] - ETA: 0s - loss: 0.6060 - accuracy: 0.6444 - AUC: 0.7071

Epoch 00012: val\_accuracy did not improve from 0.65500

67/67 [==============================] - 56s 837ms/step - loss: 0.6041 - accuracy: 0.6478 - AUC: 0.7107 - val\_loss: 0.6230 - val\_accuracy: 0.6300 - val\_AUC: 0.6818

Epoch 13/30

66/67 [============================>.] - ETA: 0s - loss: 0.6345 - accuracy: 0.6405 - AUC: 0.6987

Epoch 00013: val\_accuracy improved from 0.65500 to 0.67500, saving model to weights-improvement-13-0.68.hdf5

67/67 [==============================] - 56s 843ms/step - loss: 0.6307 - accuracy: 0.6441 - AUC: 0.7042 - val\_loss: 0.5963 - val\_accuracy: 0.6750 - val\_AUC: 0.7328

Epoch 14/30

66/67 [============================>.] - ETA: 0s - loss: 0.6006 - accuracy: 0.6730 - AUC: 0.7369

Epoch 00014: val\_accuracy did not improve from 0.67500

67/67 [==============================] - 56s 841ms/step - loss: 0.6036 - accuracy: 0.6742 - AUC: 0.7353 - val\_loss: 0.7396 - val\_accuracy: 0.6350 - val\_AUC: 0.6778

Epoch 15/30

66/67 [============================>.] - ETA: 0s - loss: 0.6204 - accuracy: 0.6635 - AUC: 0.7144

Epoch 00015: val\_accuracy did not improve from 0.67500

67/67 [==============================] - 56s 834ms/step - loss: 0.6180 - accuracy: 0.6667 - AUC: 0.7185 - val\_loss: 0.6361 - val\_accuracy: 0.6450 - val\_AUC: 0.6978

Epoch 16/30

66/67 [============================>.] - ETA: 0s - loss: 0.5913 - accuracy: 0.6520 - AUC: 0.7277

Epoch 00016: val\_accuracy did not improve from 0.67500

67/67 [==============================] - 56s 840ms/step - loss: 0.5923 - accuracy: 0.6516 - AUC: 0.7261 - val\_loss: 0.6385 - val\_accuracy: 0.5850 - val\_AUC: 0.6647

Epoch 17/30

66/67 [============================>.] - ETA: 0s - loss: 0.5382 - accuracy: 0.7036 - AUC: 0.7926

Epoch 00017: val\_accuracy did not improve from 0.67500

67/67 [==============================] - 57s 844ms/step - loss: 0.5495 - accuracy: 0.6968 - AUC: 0.7833 - val\_loss: 0.7405 - val\_accuracy: 0.6250 - val\_AUC: 0.6760

Epoch 18/30

66/67 [============================>.] - ETA: 0s - loss: 0.5386 - accuracy: 0.7342 - AUC: 0.8005

Epoch 00018: val\_accuracy did not improve from 0.67500

67/67 [==============================] - 57s 849ms/step - loss: 0.5378 - accuracy: 0.7345 - AUC: 0.8012 - val\_loss: 0.6659 - val\_accuracy: 0.6350 - val\_AUC: 0.6941

Epoch 19/30

66/67 [============================>.] - ETA: 0s - loss: 0.5381 - accuracy: 0.7055 - AUC: 0.7938

Epoch 00019: val\_accuracy improved from 0.67500 to 0.69500, saving model to weights-improvement-19-0.69.hdf5

67/67 [==============================] - 56s 835ms/step - loss: 0.5371 - accuracy: 0.7062 - AUC: 0.7951 - val\_loss: 0.5910 - val\_accuracy: 0.6950 - val\_AUC: 0.7701

Epoch 20/30

66/67 [============================>.] - ETA: 0s - loss: 0.5264 - accuracy: 0.7304 - AUC: 0.8166

Epoch 00020: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 56s 842ms/step - loss: 0.5305 - accuracy: 0.7307 - AUC: 0.8140 - val\_loss: 0.6156 - val\_accuracy: 0.6350 - val\_AUC: 0.7455

Epoch 21/30

66/67 [============================>.] - ETA: 0s - loss: 0.4668 - accuracy: 0.7935 - AUC: 0.8558

Epoch 00021: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 56s 838ms/step - loss: 0.4644 - accuracy: 0.7928 - AUC: 0.8574 - val\_loss: 0.7358 - val\_accuracy: 0.6000 - val\_AUC: 0.6995

Epoch 22/30

66/67 [============================>.] - ETA: 0s - loss: 0.4693 - accuracy: 0.7820 - AUC: 0.8568

Epoch 00022: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 57s 851ms/step - loss: 0.4749 - accuracy: 0.7815 - AUC: 0.8544 - val\_loss: 0.7245 - val\_accuracy: 0.6200 - val\_AUC: 0.7148

Epoch 23/30

66/67 [============================>.] - ETA: 0s - loss: 0.4584 - accuracy: 0.7725 - AUC: 0.8588

Epoch 00023: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 56s 842ms/step - loss: 0.4576 - accuracy: 0.7721 - AUC: 0.8593 - val\_loss: 0.7633 - val\_accuracy: 0.6450 - val\_AUC: 0.7031

Epoch 24/30

66/67 [============================>.] - ETA: 0s - loss: 0.4732 - accuracy: 0.7553 - AUC: 0.8497

Epoch 00024: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 57s 846ms/step - loss: 0.4738 - accuracy: 0.7533 - AUC: 0.8490 - val\_loss: 0.7220 - val\_accuracy: 0.6000 - val\_AUC: 0.7000

Epoch 25/30

66/67 [============================>.] - ETA: 0s - loss: 0.4803 - accuracy: 0.7533 - AUC: 0.8455

Epoch 00025: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 56s 838ms/step - loss: 0.4789 - accuracy: 0.7552 - AUC: 0.8465 - val\_loss: 0.7435 - val\_accuracy: 0.5950 - val\_AUC: 0.6916

Epoch 26/30

66/67 [============================>.] - ETA: 0s - loss: 0.4009 - accuracy: 0.8337 - AUC: 0.8956

Epoch 00026: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 56s 843ms/step - loss: 0.3999 - accuracy: 0.8324 - AUC: 0.8960 - val\_loss: 0.8927 - val\_accuracy: 0.6300 - val\_AUC: 0.7175

Epoch 27/30

66/67 [============================>.] - ETA: 0s - loss: 0.4006 - accuracy: 0.8164 - AUC: 0.8986

Epoch 00027: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 56s 835ms/step - loss: 0.3983 - accuracy: 0.8173 - AUC: 0.8999 - val\_loss: 0.6276 - val\_accuracy: 0.6650 - val\_AUC: 0.7559

Epoch 28/30

66/67 [============================>.] - ETA: 0s - loss: 0.4479 - accuracy: 0.8011 - AUC: 0.8713

Epoch 00028: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 57s 852ms/step - loss: 0.4437 - accuracy: 0.8041 - AUC: 0.8741 - val\_loss: 0.7759 - val\_accuracy: 0.6550 - val\_AUC: 0.7166

Epoch 29/30

66/67 [============================>.] - ETA: 0s - loss: 0.4124 - accuracy: 0.8145 - AUC: 0.8920

Epoch 00029: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 62s 926ms/step - loss: 0.4105 - accuracy: 0.8154 - AUC: 0.8931 - val\_loss: 0.6357 - val\_accuracy: 0.6450 - val\_AUC: 0.7529

Epoch 30/30

66/67 [============================>.] - ETA: 0s - loss: 0.4028 - accuracy: 0.8107 - AUC: 0.8984

Epoch 00030: val\_accuracy did not improve from 0.69500

67/67 [==============================] - 63s 941ms/step - loss: 0.4008 - accuracy: 0.8136 - AUC: 0.8997 - val\_loss: 0.6631 - val\_accuracy: 0.6650 - val\_AUC: 0.7534

Out[18]:

Text(0, 0.5, 'AUC')





