options =

[**TrainingOptionsSGDM**](matlab:helpPopup%20nnet.cnn.TrainingOptionsSGDM) with properties:

Momentum: 0.1000

InitialLearnRate: 1.0000e-03

LearnRateSchedule: 'none'

LearnRateDropFactor: 0.1000

LearnRateDropPeriod: 5

L2Regularization: 1.0000e-04

GradientThresholdMethod: 'l2norm'

GradientThreshold: Inf

MaxEpochs: 50

MiniBatchSize: 20

Verbose: 1

VerboseFrequency: 50

ValidationData: [1×1 augmentedImageDatastore]

ValidationFrequency: 4000

ValidationPatience: Inf

Shuffle: 'every-epoch'

CheckpointPath: ''

ExecutionEnvironment: 'gpu'

WorkerLoad: []

OutputFcn: []

Plots: 'training-progress'

SequenceLength: 'longest'

SequencePaddingValue: 0

SequencePaddingDirection: 'right'

DispatchInBackground: 0

ResetInputNormalization: 1

Initializing input data normalization.

|======================================================================================================================|

| Epoch | Iteration | Time Elapsed | Mini-batch | Validation | Mini-batch | Validation | Base Learning |

| | | (hh:mm:ss) | Accuracy | Accuracy | Loss | Loss | Rate |

|======================================================================================================================|

| 1 | 1 | 00:00:37 | 5.00% | 1.63% | 4.2559 | 4.2070 | 0.0010 |

| 1 | 50 | 00:00:57 | 15.00% | | 3.8756 | | 0.0010 |

| 1 | 100 | 00:01:17 | 25.00% | | 3.5009 | | 0.0010 |

| 1 | 150 | 00:01:37 | 0.00% | | 3.8131 | | 0.0010 |

| 1 | 200 | 00:01:57 | 15.00% | | 3.6293 | | 0.0010 |

| 1 | 250 | 00:02:17 | 0.00% | | 3.5735 | | 0.0010 |

| 1 | 300 | 00:02:37 | 5.00% | | 3.5931 | | 0.0010 |

| 2 | 350 | 00:02:58 | 15.00% | | 3.4497 | | 0.0010 |

| 2 | 400 | 00:03:19 | 10.00% | | 3.6277 | | 0.0010 |

| 2 | 450 | 00:03:40 | 5.00% | | 3.8030 | | 0.0010 |

| 2 | 500 | 00:04:00 | 10.00% | | 3.3748 | | 0.0010 |

| 2 | 550 | 00:04:21 | 10.00% | | 3.5136 | | 0.0010 |

| 2 | 600 | 00:04:42 | 10.00% | | 3.5350 | | 0.0010 |

| 3 | 650 | 00:05:02 | 20.00% | | 3.4192 | | 0.0010 |

| 3 | 700 | 00:05:23 | 10.00% | | 3.5658 | | 0.0010 |

| 3 | 750 | 00:05:43 | 5.00% | | 3.6819 | | 0.0010 |

| 3 | 800 | 00:06:04 | 10.00% | | 3.6249 | | 0.0010 |

| 3 | 850 | 00:06:24 | 20.00% | | 3.5024 | | 0.0010 |

| 3 | 900 | 00:06:45 | 15.00% | | 3.4056 | | 0.0010 |

| 4 | 950 | 00:07:06 | 30.00% | | 3.5053 | | 0.0010 |

| 4 | 1000 | 00:07:27 | 15.00% | | 3.6496 | | 0.0010 |

| 4 | 1050 | 00:07:49 | 20.00% | | 3.3649 | | 0.0010 |

| 4 | 1100 | 00:08:09 | 10.00% | | 3.3367 | | 0.0010 |

| 4 | 1150 | 00:08:30 | 25.00% | | 3.4172 | | 0.0010 |

| 4 | 1200 | 00:08:50 | 30.00% | | 3.0292 | | 0.0010 |

| 5 | 1250 | 00:09:11 | 25.00% | | 3.0998 | | 0.0010 |

| 5 | 1300 | 00:09:32 | 20.00% | | 3.0443 | | 0.0010 |

| 5 | 1350 | 00:09:52 | 20.00% | | 3.2973 | | 0.0010 |

| 5 | 1400 | 00:10:12 | 15.00% | | 3.2424 | | 0.0010 |

| 5 | 1450 | 00:10:33 | 20.00% | | 3.4371 | | 0.0010 |

| 5 | 1500 | 00:10:53 | 15.00% | | 3.4156 | | 0.0010 |

| 6 | 1550 | 00:11:14 | 20.00% | | 3.2791 | | 0.0010 |

| 6 | 1600 | 00:11:35 | 35.00% | | 2.5405 | | 0.0010 |

| 6 | 1650 | 00:11:56 | 15.00% | | 3.1180 | | 0.0010 |

| 6 | 1700 | 00:12:16 | 5.00% | | 3.4572 | | 0.0010 |

| 6 | 1750 | 00:12:37 | 25.00% | | 2.8425 | | 0.0010 |

| 6 | 1800 | 00:12:58 | 25.00% | | 2.7952 | | 0.0010 |

| 7 | 1850 | 00:13:19 | 10.00% | | 3.2015 | | 0.0010 |

| 7 | 1900 | 00:13:39 | 20.00% | | 3.0376 | | 0.0010 |

| 7 | 1950 | 00:14:00 | 35.00% | | 3.1214 | | 0.0010 |

| 7 | 2000 | 00:14:21 | 15.00% | | 3.1850 | | 0.0010 |

| 7 | 2050 | 00:14:42 | 25.00% | | 3.1996 | | 0.0010 |

| 7 | 2100 | 00:15:02 | 15.00% | | 3.1617 | | 0.0010 |

| 8 | 2150 | 00:15:23 | 10.00% | | 3.4567 | | 0.0010 |

| 8 | 2200 | 00:15:44 | 40.00% | | 2.5832 | | 0.0010 |

| 8 | 2250 | 00:16:05 | 15.00% | | 3.1274 | | 0.0010 |

| 8 | 2300 | 00:16:26 | 40.00% | | 2.5568 | | 0.0010 |

| 8 | 2350 | 00:16:46 | 25.00% | | 3.1509 | | 0.0010 |

| 8 | 2400 | 00:17:07 | 30.00% | | 3.0808 | | 0.0010 |

| 8 | 2450 | 00:17:28 | 35.00% | | 3.1976 | | 0.0010 |

| 9 | 2500 | 00:17:49 | 20.00% | | 3.1120 | | 0.0010 |

| 9 | 2550 | 00:18:10 | 30.00% | | 2.8047 | | 0.0010 |

| 9 | 2600 | 00:18:31 | 20.00% | | 3.1029 | | 0.0010 |

| 9 | 2650 | 00:18:52 | 10.00% | | 3.1415 | | 0.0010 |

| 9 | 2700 | 00:19:13 | 30.00% | | 2.9536 | | 0.0010 |

| 9 | 2750 | 00:19:34 | 30.00% | | 2.6408 | | 0.0010 |

| 10 | 2800 | 00:19:55 | 20.00% | | 2.8510 | | 0.0010 |

| 10 | 2850 | 00:20:16 | 25.00% | | 2.8050 | | 0.0010 |

| 10 | 2900 | 00:20:36 | 15.00% | | 3.1802 | | 0.0010 |

| 10 | 2950 | 00:20:57 | 20.00% | | 2.9932 | | 0.0010 |

| 10 | 3000 | 00:21:18 | 30.00% | | 2.7872 | | 0.0010 |

| 10 | 3050 | 00:21:39 | 20.00% | | 2.7632 | | 0.0010 |

| 11 | 3100 | 00:22:00 | 20.00% | | 3.0514 | | 0.0010 |

| 11 | 3150 | 00:22:21 | 40.00% | | 2.6729 | | 0.0010 |

| 11 | 3200 | 00:22:42 | 35.00% | | 2.6524 | | 0.0010 |

| 11 | 3250 | 00:23:02 | 20.00% | | 3.0676 | | 0.0010 |

| 11 | 3300 | 00:23:23 | 15.00% | | 3.0950 | | 0.0010 |

| 11 | 3350 | 00:23:44 | 10.00% | | 3.2167 | | 0.0010 |

| 12 | 3400 | 00:24:04 | 25.00% | | 2.7738 | | 0.0010 |

| 12 | 3450 | 00:24:25 | 35.00% | | 2.6904 | | 0.0010 |

| 12 | 3500 | 00:24:46 | 35.00% | | 2.6609 | | 0.0010 |

| 12 | 3550 | 00:25:06 | 20.00% | | 3.0668 | | 0.0010 |

| 12 | 3600 | 00:25:27 | 30.00% | | 3.0198 | | 0.0010 |

| 12 | 3650 | 00:25:48 | 30.00% | | 2.6151 | | 0.0010 |

| 13 | 3700 | 00:26:09 | 20.00% | | 2.7854 | | 0.0010 |

| 13 | 3750 | 00:26:29 | 10.00% | | 2.9034 | | 0.0010 |

| 13 | 3800 | 00:26:50 | 15.00% | | 3.0011 | | 0.0010 |

| 13 | 3850 | 00:27:11 | 25.00% | | 2.6191 | | 0.0010 |

| 13 | 3900 | 00:27:31 | 30.00% | | 2.9006 | | 0.0010 |

| 13 | 3950 | 00:27:52 | 30.00% | | 2.4351 | | 0.0010 |

| 14 | 4000 | 00:28:44 | 20.00% | 24.33% | 3.1821 | 2.7824 | 0.0010 |

| 14 | 4050 | 00:29:05 | 45.00% | | 2.4699 | | 0.0010 |

| 14 | 4100 | 00:29:25 | 10.00% | | 3.2660 | | 0.0010 |

| 14 | 4150 | 00:29:46 | 15.00% | | 2.5965 | | 0.0010 |

| 14 | 4200 | 00:30:06 | 25.00% | | 3.0980 | | 0.0010 |

| 14 | 4250 | 00:30:27 | 25.00% | | 2.7596 | | 0.0010 |

| 15 | 4300 | 00:30:48 | 30.00% | | 2.4924 | | 0.0010 |

| 15 | 4350 | 00:31:09 | 30.00% | | 2.6141 | | 0.0010 |

| 15 | 4400 | 00:31:29 | 20.00% | | 2.9856 | | 0.0010 |

| 15 | 4450 | 00:31:50 | 25.00% | | 2.3876 | | 0.0010 |

| 15 | 4500 | 00:32:11 | 30.00% | | 2.5219 | | 0.0010 |

| 15 | 4550 | 00:32:32 | 20.00% | | 2.6391 | | 0.0010 |

| 15 | 4600 | 00:32:52 | 25.00% | | 2.6659 | | 0.0010 |

| 16 | 4650 | 00:33:13 | 35.00% | | 2.1664 | | 0.0010 |

| 16 | 4700 | 00:33:33 | 30.00% | | 2.3544 | | 0.0010 |

| 16 | 4750 | 00:33:54 | 20.00% | | 2.9218 | | 0.0010 |

| 16 | 4800 | 00:34:16 | 20.00% | | 2.8065 | | 0.0010 |

| 16 | 4850 | 00:34:47 | 25.00% | | 3.0300 | | 0.0010 |

| 16 | 4900 | 00:35:11 | 35.00% | | 2.6937 | | 0.0010 |

| 17 | 4950 | 00:35:33 | 30.00% | | 2.5683 | | 0.0010 |

| 17 | 5000 | 00:35:54 | 40.00% | | 2.9636 | | 0.0010 |

| 17 | 5050 | 00:36:15 | 20.00% | | 2.5527 | | 0.0010 |

| 17 | 5100 | 00:36:36 | 50.00% | | 2.3367 | | 0.0010 |

| 17 | 5150 | 00:36:57 | 20.00% | | 2.8174 | | 0.0010 |

| 17 | 5200 | 00:37:17 | 15.00% | | 3.0457 | | 0.0010 |

| 18 | 5250 | 00:37:38 | 20.00% | | 2.6334 | | 0.0010 |

| 18 | 5300 | 00:37:59 | 25.00% | | 3.1475 | | 0.0010 |

| 18 | 5350 | 00:38:21 | 35.00% | | 2.6158 | | 0.0010 |

| 18 | 5400 | 00:38:42 | 25.00% | | 2.7596 | | 0.0010 |

| 18 | 5450 | 00:39:02 | 40.00% | | 2.3950 | | 0.0010 |

| 18 | 5500 | 00:39:24 | 20.00% | | 2.8478 | | 0.0010 |

| 19 | 5550 | 00:39:45 | 30.00% | | 2.7666 | | 0.0010 |

| 19 | 5600 | 00:40:06 | 50.00% | | 1.7739 | | 0.0010 |

| 19 | 5650 | 00:40:28 | 40.00% | | 2.4964 | | 0.0010 |

| 19 | 5700 | 00:40:49 | 20.00% | | 3.0531 | | 0.0010 |

| 19 | 5750 | 00:41:09 | 25.00% | | 2.6553 | | 0.0010 |

| 19 | 5800 | 00:41:31 | 25.00% | | 3.0039 | | 0.0010 |

| 20 | 5850 | 00:41:52 | 5.00% | | 2.8418 | | 0.0010 |

| 20 | 5900 | 00:42:14 | 30.00% | | 2.5210 | | 0.0010 |

| 20 | 5950 | 00:42:35 | 35.00% | | 2.3826 | | 0.0010 |

| 20 | 6000 | 00:42:55 | 35.00% | | 2.3626 | | 0.0010 |

| 20 | 6050 | 00:43:17 | 25.00% | | 2.8249 | | 0.0010 |

| 20 | 6100 | 00:43:38 | 25.00% | | 2.8305 | | 0.0010 |

| 21 | 6150 | 00:43:59 | 40.00% | | 2.4301 | | 0.0010 |

| 21 | 6200 | 00:44:20 | 40.00% | | 2.1243 | | 0.0010 |

| 21 | 6250 | 00:44:41 | 45.00% | | 2.1250 | | 0.0010 |

| 21 | 6300 | 00:45:02 | 40.00% | | 2.5597 | | 0.0010 |

| 21 | 6350 | 00:45:23 | 65.00% | | 2.0692 | | 0.0010 |

| 21 | 6400 | 00:45:44 | 35.00% | | 2.5435 | | 0.0010 |

| 22 | 6450 | 00:46:06 | 35.00% | | 2.2932 | | 0.0010 |

| 22 | 6500 | 00:46:27 | 40.00% | | 2.2551 | | 0.0010 |

| 22 | 6550 | 00:46:48 | 35.00% | | 2.2054 | | 0.0010 |

| 22 | 6600 | 00:47:09 | 15.00% | | 2.7993 | | 0.0010 |

| 22 | 6650 | 00:47:30 | 25.00% | | 2.0944 | | 0.0010 |

| 22 | 6700 | 00:47:51 | 40.00% | | 2.7542 | | 0.0010 |

| 22 | 6750 | 00:48:12 | 20.00% | | 2.4157 | | 0.0010 |

| 23 | 6800 | 00:48:34 | 30.00% | | 2.5412 | | 0.0010 |

| 23 | 6850 | 00:48:55 | 35.00% | | 2.3186 | | 0.0010 |

| 23 | 6900 | 00:49:16 | 30.00% | | 2.2585 | | 0.0010 |

| 23 | 6950 | 00:49:37 | 40.00% | | 2.1425 | | 0.0010 |

| 23 | 7000 | 00:49:58 | 40.00% | | 2.1522 | | 0.0010 |

| 23 | 7050 | 00:50:19 | 15.00% | | 2.9686 | | 0.0010 |

| 24 | 7100 | 00:50:40 | 40.00% | | 2.1559 | | 0.0010 |

| 24 | 7150 | 00:51:01 | 25.00% | | 2.6567 | | 0.0010 |

| 24 | 7200 | 00:51:23 | 20.00% | | 2.4763 | | 0.0010 |

| 24 | 7250 | 00:51:44 | 30.00% | | 2.2310 | | 0.0010 |

| 24 | 7300 | 00:52:06 | 30.00% | | 2.6178 | | 0.0010 |

| 24 | 7350 | 00:52:27 | 30.00% | | 2.4711 | | 0.0010 |

| 25 | 7400 | 00:52:48 | 40.00% | | 2.1087 | | 0.0010 |

| 25 | 7450 | 00:53:09 | 40.00% | | 2.3862 | | 0.0010 |

| 25 | 7500 | 00:53:30 | 30.00% | | 2.7483 | | 0.0010 |

| 25 | 7550 | 00:53:51 | 35.00% | | 2.6659 | | 0.0010 |

| 25 | 7600 | 00:54:12 | 20.00% | | 3.0721 | | 0.0010 |

| 25 | 7650 | 00:54:33 | 20.00% | | 2.7160 | | 0.0010 |

| 26 | 7700 | 00:54:54 | 35.00% | | 2.2374 | | 0.0010 |

| 26 | 7750 | 00:55:15 | 50.00% | | 1.9591 | | 0.0010 |

| 26 | 7800 | 00:55:36 | 25.00% | | 2.7374 | | 0.0010 |

| 26 | 7850 | 00:55:57 | 40.00% | | 2.3344 | | 0.0010 |

| 26 | 7900 | 00:56:19 | 35.00% | | 2.5516 | | 0.0010 |

| 26 | 7950 | 00:56:39 | 20.00% | | 2.7819 | | 0.0010 |

| 27 | 8000 | 00:57:32 | 35.00% | 34.37% | 2.1416 | 2.3303 | 0.0010 |

| 27 | 8050 | 00:57:55 | 65.00% | | 1.9301 | | 0.0010 |

| 27 | 8100 | 00:58:20 | 40.00% | | 1.9473 | | 0.0010 |

| 27 | 8150 | 00:58:41 | 50.00% | | 1.8081 | | 0.0010 |

| 27 | 8200 | 00:59:02 | 25.00% | | 2.5587 | | 0.0010 |

| 27 | 8250 | 00:59:23 | 25.00% | | 2.4389 | | 0.0010 |

| 28 | 8300 | 00:59:45 | 45.00% | | 1.5986 | | 0.0010 |

| 28 | 8350 | 01:00:07 | 35.00% | | 2.4583 | | 0.0010 |

| 28 | 8400 | 01:00:31 | 40.00% | | 1.7903 | | 0.0010 |

| 28 | 8450 | 01:00:55 | 30.00% | | 2.3150 | | 0.0010 |

| 28 | 8500 | 01:01:19 | 30.00% | | 2.3488 | | 0.0010 |

| 28 | 8550 | 01:01:42 | 30.00% | | 2.2886 | | 0.0010 |

| 29 | 8600 | 01:02:03 | 45.00% | | 2.2883 | | 0.0010 |

| 29 | 8650 | 01:02:24 | 40.00% | | 2.5623 | | 0.0010 |

| 29 | 8700 | 01:02:45 | 40.00% | | 2.0967 | | 0.0010 |

| 29 | 8750 | 01:03:05 | 50.00% | | 1.9148 | | 0.0010 |

| 29 | 8800 | 01:03:27 | 25.00% | | 2.1201 | | 0.0010 |

| 29 | 8850 | 01:03:48 | 30.00% | | 2.6631 | | 0.0010 |

| 29 | 8900 | 01:04:09 | 20.00% | | 2.7938 | | 0.0010 |

| 30 | 8950 | 01:04:30 | 25.00% | | 2.7442 | | 0.0010 |

| 30 | 9000 | 01:04:51 | 50.00% | | 1.8866 | | 0.0010 |

| 30 | 9050 | 01:05:12 | 25.00% | | 3.0406 | | 0.0010 |

| 30 | 9100 | 01:05:33 | 45.00% | | 2.1787 | | 0.0010 |

| 30 | 9150 | 01:05:55 | 30.00% | | 2.4843 | | 0.0010 |

| 30 | 9200 | 01:06:16 | 35.00% | | 2.2559 | | 0.0010 |

| 31 | 9250 | 01:06:37 | 40.00% | | 2.6706 | | 0.0010 |

| 31 | 9300 | 01:06:59 | 40.00% | | 2.1729 | | 0.0010 |

| 31 | 9350 | 01:07:21 | 35.00% | | 1.9693 | | 0.0010 |

| 31 | 9400 | 01:07:42 | 55.00% | | 1.8047 | | 0.0010 |

| 31 | 9450 | 01:08:03 | 30.00% | | 2.6116 | | 0.0010 |

| 31 | 9500 | 01:08:24 | 35.00% | | 2.7629 | | 0.0010 |

| 32 | 9550 | 01:08:45 | 45.00% | | 2.0534 | | 0.0010 |

| 32 | 9600 | 01:09:06 | 60.00% | | 1.5184 | | 0.0010 |

| 32 | 9650 | 01:09:27 | 30.00% | | 2.2689 | | 0.0010 |

| 32 | 9700 | 01:09:48 | 25.00% | | 2.1399 | | 0.0010 |

| 32 | 9750 | 01:10:10 | 35.00% | | 1.9788 | | 0.0010 |

| 32 | 9800 | 01:10:31 | 30.00% | | 2.2489 | | 0.0010 |

| 33 | 9850 | 01:10:52 | 30.00% | | 2.2683 | | 0.0010 |

| 33 | 9900 | 01:11:13 | 30.00% | | 2.2916 | | 0.0010 |

| 33 | 9950 | 01:11:34 | 30.00% | | 2.6577 | | 0.0010 |

| 33 | 10000 | 01:11:55 | 35.00% | | 2.2036 | | 0.0010 |

| 33 | 10050 | 01:12:17 | 45.00% | | 2.1053 | | 0.0010 |

| 33 | 10100 | 01:12:38 | 35.00% | | 2.0017 | | 0.0010 |

| 34 | 10150 | 01:12:59 | 50.00% | | 1.9047 | | 0.0010 |

| 34 | 10200 | 01:13:26 | 40.00% | | 2.2318 | | 0.0010 |

| 34 | 10250 | 01:14:00 | 35.00% | | 2.1790 | | 0.0010 |

| 34 | 10300 | 01:14:25 | 45.00% | | 2.5007 | | 0.0010 |

| 34 | 10350 | 01:14:49 | 40.00% | | 2.3787 | | 0.0010 |

| 34 | 10400 | 01:15:18 | 55.00% | | 1.9617 | | 0.0010 |

| 35 | 10450 | 01:15:43 | 45.00% | | 1.9544 | | 0.0010 |

| 35 | 10500 | 01:16:06 | 25.00% | | 2.0607 | | 0.0010 |

| 35 | 10550 | 01:16:29 | 40.00% | | 1.9429 | | 0.0010 |

| 35 | 10600 | 01:16:51 | 45.00% | | 2.1417 | | 0.0010 |

| 35 | 10650 | 01:17:13 | 40.00% | | 2.1774 | | 0.0010 |

| 35 | 10700 | 01:17:38 | 40.00% | | 2.0192 | | 0.0010 |

| 36 | 10750 | 01:18:06 | 60.00% | | 1.8742 | | 0.0010 |

| 36 | 10800 | 01:18:31 | 55.00% | | 1.9352 | | 0.0010 |

| 36 | 10850 | 01:18:54 | 40.00% | | 2.4108 | | 0.0010 |

| 36 | 10900 | 01:19:18 | 25.00% | | 2.4969 | | 0.0010 |

| 36 | 10950 | 01:19:42 | 35.00% | | 1.8444 | | 0.0010 |

| 36 | 11000 | 01:20:08 | 30.00% | | 2.1421 | | 0.0010 |

| 36 | 11050 | 01:20:43 | 55.00% | | 1.7609 | | 0.0010 |

| 37 | 11100 | 01:21:10 | 35.00% | | 2.6035 | | 0.0010 |

| 37 | 11150 | 01:21:39 | 45.00% | | 1.8796 | | 0.0010 |

| 37 | 11200 | 01:22:08 | 35.00% | | 2.1802 | | 0.0010 |

| 37 | 11250 | 01:22:38 | 35.00% | | 1.8731 | | 0.0010 |

| 37 | 11300 | 01:23:06 | 50.00% | | 1.7696 | | 0.0010 |

| 37 | 11350 | 01:23:35 | 45.00% | | 1.8185 | | 0.0010 |

| 38 | 11400 | 01:24:02 | 45.00% | | 1.7345 | | 0.0010 |

| 38 | 11450 | 01:24:29 | 50.00% | | 1.3525 | | 0.0010 |

| 38 | 11500 | 01:24:57 | 40.00% | | 1.9134 | | 0.0010 |

| 38 | 11550 | 01:25:31 | 50.00% | | 1.8151 | | 0.0010 |

| 38 | 11600 | 01:25:58 | 50.00% | | 2.2601 | | 0.0010 |

| 38 | 11650 | 01:26:25 | 30.00% | | 2.3349 | | 0.0010 |

| 39 | 11700 | 01:26:52 | 40.00% | | 2.2270 | | 0.0010 |

| 39 | 11750 | 01:27:23 | 35.00% | | 2.3681 | | 0.0010 |

| 39 | 11800 | 01:27:50 | 45.00% | | 1.9963 | | 0.0010 |

| 39 | 11850 | 01:28:16 | 40.00% | | 1.7457 | | 0.0010 |

| 39 | 11900 | 01:28:43 | 45.00% | | 1.9692 | | 0.0010 |

| 39 | 11950 | 01:29:12 | 50.00% | | 2.0559 | | 0.0010 |

| 40 | 12000 | 01:30:19 | 30.00% | 39.01% | 2.3370 | 2.1954 | 0.0010 |

| 40 | 12050 | 01:30:45 | 20.00% | | 2.5496 | | 0.0010 |

| 40 | 12100 | 01:31:11 | 40.00% | | 2.4260 | | 0.0010 |

| 40 | 12150 | 01:31:37 | 50.00% | | 1.9515 | | 0.0010 |

| 40 | 12200 | 01:32:04 | 40.00% | | 1.6291 | | 0.0010 |

| 40 | 12250 | 01:32:30 | 35.00% | | 2.0857 | | 0.0010 |

| 41 | 12300 | 01:32:57 | 50.00% | | 1.9026 | | 0.0010 |

| 41 | 12350 | 01:33:24 | 55.00% | | 1.8900 | | 0.0010 |

| 41 | 12400 | 01:33:50 | 45.00% | | 2.2643 | | 0.0010 |

| 41 | 12450 | 01:34:13 | 30.00% | | 1.9378 | | 0.0010 |

| 41 | 12500 | 01:34:44 | 50.00% | | 2.0018 | | 0.0010 |

| 41 | 12550 | 01:35:14 | 55.00% | | 1.7119 | | 0.0010 |

| 42 | 12600 | 01:35:42 | 70.00% | | 1.3737 | | 0.0010 |

| 42 | 12650 | 01:36:08 | 25.00% | | 2.6408 | | 0.0010 |

| 42 | 12700 | 01:36:33 | 45.00% | | 1.8585 | | 0.0010 |

| 42 | 12750 | 01:37:05 | 45.00% | | 1.9737 | | 0.0010 |

| 42 | 12800 | 01:37:37 | 50.00% | | 1.7732 | | 0.0010 |

| 42 | 12850 | 01:38:04 | 55.00% | | 1.7103 | | 0.0010 |

| 43 | 12900 | 01:38:33 | 30.00% | | 2.2593 | | 0.0010 |

| 43 | 12950 | 01:39:02 | 40.00% | | 1.9227 | | 0.0010 |

| 43 | 13000 | 01:39:33 | 40.00% | | 2.2673 | | 0.0010 |

| 43 | 13050 | 01:40:01 | 30.00% | | 2.0779 | | 0.0010 |

| 43 | 13100 | 01:40:28 | 40.00% | | 2.0560 | | 0.0010 |

| 43 | 13150 | 01:40:55 | 45.00% | | 1.6276 | | 0.0010 |

| 43 | 13200 | 01:41:22 | 65.00% | | 1.4624 | | 0.0010 |

| 44 | 13250 | 01:41:48 | 50.00% | | 1.6174 | | 0.0010 |

| 44 | 13300 | 01:42:15 | 45.00% | | 1.8124 | | 0.0010 |

| 44 | 13350 | 01:42:41 | 55.00% | | 1.5444 | | 0.0010 |

| 44 | 13400 | 01:43:08 | 55.00% | | 1.3580 | | 0.0010 |

| 44 | 13450 | 01:43:35 | 45.00% | | 1.8127 | | 0.0010 |

| 44 | 13500 | 01:44:01 | 30.00% | | 2.2433 | | 0.0010 |

| 45 | 13550 | 01:44:27 | 30.00% | | 2.2129 | | 0.0010 |

| 45 | 13600 | 01:44:52 | 40.00% | | 2.0691 | | 0.0010 |

| 45 | 13650 | 01:45:18 | 55.00% | | 1.4708 | | 0.0010 |

| 45 | 13700 | 01:45:42 | 55.00% | | 1.6597 | | 0.0010 |

| 45 | 13750 | 01:46:05 | 35.00% | | 2.0996 | | 0.0010 |

| 45 | 13800 | 01:46:29 | 45.00% | | 2.0877 | | 0.0010 |

| 46 | 13850 | 01:46:54 | 45.00% | | 1.9006 | | 0.0010 |

| 46 | 13900 | 01:47:19 | 35.00% | | 1.8072 | | 0.0010 |

| 46 | 13950 | 01:47:46 | 40.00% | | 2.1109 | | 0.0010 |

| 46 | 14000 | 01:48:13 | 45.00% | | 1.5527 | | 0.0010 |

| 46 | 14050 | 01:48:39 | 35.00% | | 2.1587 | | 0.0010 |

| 46 | 14100 | 01:49:05 | 50.00% | | 2.1427 | | 0.0010 |

| 47 | 14150 | 01:49:28 | 30.00% | | 2.3231 | | 0.0010 |

| 47 | 14200 | 01:49:53 | 45.00% | | 1.8391 | | 0.0010 |

| 47 | 14250 | 01:50:23 | 45.00% | | 1.6928 | | 0.0010 |

| 47 | 14300 | 01:50:47 | 50.00% | | 1.7860 | | 0.0010 |

| 47 | 14350 | 01:51:12 | 35.00% | | 1.9989 | | 0.0010 |

| 47 | 14400 | 01:51:42 | 30.00% | | 2.1356 | | 0.0010 |

| 48 | 14450 | 01:52:14 | 35.00% | | 2.3671 | | 0.0010 |

| 48 | 14500 | 01:52:42 | 50.00% | | 1.7297 | | 0.0010 |

| 48 | 14550 | 01:53:07 | 40.00% | | 1.4790 | | 0.0010 |

| 48 | 14600 | 01:53:35 | 35.00% | | 2.5805 | | 0.0010 |

| 48 | 14650 | 01:54:01 | 35.00% | | 2.3218 | | 0.0010 |

| 48 | 14700 | 01:54:28 | 55.00% | | 1.7147 | | 0.0010 |

| 49 | 14750 | 01:54:52 | 50.00% | | 1.7790 | | 0.0010 |

| 49 | 14800 | 01:55:16 | 50.00% | | 1.6349 | | 0.0010 |

| 49 | 14850 | 01:55:40 | 45.00% | | 2.0524 | | 0.0010 |

| 49 | 14900 | 01:56:02 | 50.00% | | 1.6348 | | 0.0010 |

| 49 | 14950 | 01:56:25 | 45.00% | | 2.0575 | | 0.0010 |

| 49 | 15000 | 01:56:50 | 50.00% | | 2.0683 | | 0.0010 |

| 50 | 15050 | 01:57:24 | 55.00% | | 1.4842 | | 0.0010 |

| 50 | 15100 | 01:57:54 | 65.00% | | 1.2004 | | 0.0010 |

| 50 | 15150 | 01:58:23 | 60.00% | | 1.3587 | | 0.0010 |

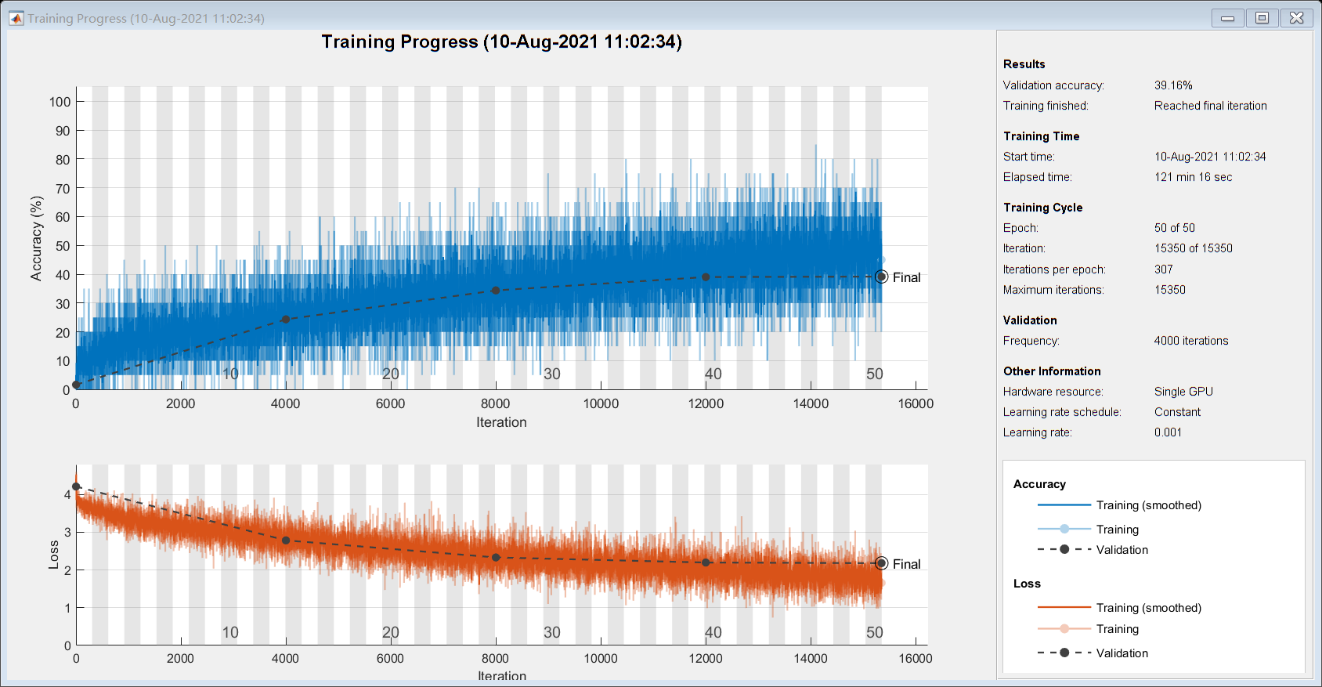
| 50 | 15200 | 01:58:54 | 40.00% | | 2.2747 | | 0.0010 |

| 50 | 15250 | 01:59:18 | 55.00% | | 1.4047 | | 0.0010 |

| 50 | 15300 | 01:59:41 | 45.00% | | 1.3938 | | 0.0010 |

| 50 | 15350 | 02:00:39 | 45.00% | 39.16% | 1.6564 | 2.1790 | 0.0010 |

|======================================================================================================================|



net =

[**DAGNetwork**](matlab:helpPopup%20DAGNetwork) with properties:

Layers: [144×1 nnet.cnn.layer.Layer]

Connections: [170×2 table]

InputNames: {'data'}

OutputNames: {'output'}

traininfo = struct with fields:

TrainingLoss: [1×15350 double]

TrainingAccuracy: [1×15350 double]

ValidationLoss: [1×15350 double]

ValidationAccuracy: [1×15350 double]

BaseLearnRate: [1×15350 double]

FinalValidationLoss: 2.1790

FinalValidationAccuracy: 39.1635