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(mini6es) ~/w/p/p/sin6es(mini)
kitty
~/w/p/p/sin6es(mini)

(mini6es) ● 2s ■ a /workhub/python/project/sin6es(mini)
✕ ▶ python src/train_recognition.py
2025-10-25 21:01:11,975  | INFO |  __main__ |  Using device: cuda
2025-10-25 21:01:12,427  | INFO |  __main__ |  Discovered 54 classes | 809 training videos | 225 validation videos
2025-10-25 21:01:13,215  | INFO |  __main__ |  Total trainable parameters: 26.94M
2025-10-25 21:01:13,216  | INFO |  __main__ |  Initial learning rates → backbone: 3.00e-04 | classifier: 3.00e-04
2025-10-25 21:01:13,216  | INFO |  __main__ |  Using cosine scheduler without warmup
/home/aditya/workhub/python/project/sin6es(mini)/src/train_recognition.py:310: FutureWarning: `torch.cuda.amp.GradScaler(args...)` is deprecated. Please use `torch.amp.GradScaler('cuda', args...)` instead.
  scaler = GradScaler(enabled=bool(train_config.get("mixed_precision", False)))
2025-10-25 21:01:13,216  | INFO |  __main__ |  Starting training loop
/home/aditya/workhub/python/project/sin6es(mini)/src/train_recognition.py:335: FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch.amp.autocast('cuda', args...)` instead.
  with autocast(enabled=scaler.is_enabled()):
2025-10-25 21:06:26,339  | INFO |  __main__ |  Epoch  1 | LRs [3.00e-04, 3.00e-04] | Train loss: 3.9589 acc: 0.0519 top5: 0.2040 | Val loss: 3.7571 acc: 0.0356 top5: 0.2400
2025-10-25 21:06:27,175  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.0356)
2025-10-25 21:11:36,152  | INFO |  __main__ |  Epoch  2 | LRs [2.99e-04, 2.99e-04] | Train loss: 3.3873 acc: 0.0977 top5: 0.3622 | Val loss: 3.3470 acc: 0.1156 top5: 0.4207
2025-10-25 21:11:36,567  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.1156)
2025-10-25 21:16:47,963  | INFO |  __main__ |  Epoch  3 | LRs [2.95e-04, 2.95e-04] | Train loss: 3.0869 acc: 0.1508 top5: 0.4907 | Val loss: 3.4624 acc: 0.0933 top5: 0.3467
2025-10-25 21:22:04,532  | INFO |  __main__ |  Epoch  4 | LRs [2.89e-04, 2.89e-04] | Train loss: 2.8216 acc: 0.1681 top5: 0.5748 | Val loss: 2.9028 acc: 0.1333 top5: 0.5378
2025-10-25 21:22:05,034  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.1333)
2025-10-25 21:27:17,136  | INFO |  __main__ |  Epoch  5 | LRs [2.81e-04, 2.81e-04] | Train loss: 2.5976 acc: 0.2213 top5: 0.6230 | Val loss: 3.1631 acc: 0.1333 top5: 0.4489
2025-10-25 21:32:36,296  | INFO |  __main__ |  Epoch  6 | LRs [2.71e-04, 2.71e-04] | Train loss: 2.3297 acc: 0.2645 top5: 0.7219 | Val loss: 2.6885 acc: 0.1956 top5: 0.6444
2025-10-25 21:32:36,789  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.1956)
2025-10-25 21:37:58,832  | INFO |  __main__ |  Epoch  7 | LRs [2.59e-04, 2.59e-04] | Train loss: 2.2499 acc: 0.2905 top5: 0.7429 | Val loss: 3.0415 acc: 0.1200 top5: 0.5733
2025-10-25 21:43:14,640  | INFO |  __main__ |  Epoch  8 | LRs [2.46e-04, 2.46e-04] | Train loss: 2.0876 acc: 0.3511 top5: 0.7713 | Val loss: 2.7966 acc: 0.2089 top5: 0.6178
2025-10-25 21:43:15,122  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.2089)
2025-10-25 21:48:28,784  | INFO |  __main__ |  Epoch  9 | LRs [2.30e-04, 2.30e-04] | Train loss: 1.8615 acc: 0.3696 top5: 0.8430 | Val loss: 2.5023 acc: 0.2756 top5: 0.7289
2025-10-25 21:48:29,200  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.2756)
2025-10-25 21:53:42,867  | INFO |  __main__ |  Epoch 10 | LRs [2.14e-04, 2.14e-04] | Train loss: 1.7292 acc: 0.4339 top5: 0.8875 | Val loss: 2.4976 acc: 0.2976 top5: 0.7378
2025-10-25 21:58:56,299  | INFO |  __main__ |  Epoch 11 | LRs [1.96e-04, 1.96e-04] | Train loss: 1.6092 acc: 0.4611 top5: 0.8925 | Val loss: 2.3948 acc: 0.3667 top5: 0.7644
2025-10-25 21:58:56,736  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.3667)
2025-10-25 22:04:11,331  | INFO |  __main__ |  Epoch 12 | LRs [1.78e-04, 1.78e-04] | Train loss: 1.5342 acc: 0.4845 top5: 0.8838 | Val loss: 2.3791 acc: 0.2844 top5: 0.7733
2025-10-25 22:09:27,704  | INFO |  __main__ |  Epoch 13 | LRs [1.59e-04, 1.59e-04] | Train loss: 1.4614 acc: 0.5031 top5: 0.9172 | Val loss: 2.4654 acc: 0.2933 top5: 0.7378
2025-10-25 22:14:40,874  | INFO |  __main__ |  Epoch 14 | LRs [1.41e-04, 1.41e-04] | Train loss: 1.3539 acc: 0.5024 top5: 0.9159 | Val loss: 2.6790 acc: 0.2578 top5: 0.6444
2025-10-25 22:20:15,124  | INFO |  __main__ |  Epoch 15 | LRs [1.22e-04, 1.22e-04] | Train loss: 1.2671 acc: 0.5735 top5: 0.9295 | Val loss: 2.4607 acc: 0.3111 top5: 0.7467
2025-10-25 22:20:16,545  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.3111)
2025-10-25 22:25:54,768  | INFO |  __main__ |  Epoch 16 | LRs [1.04e-04, 1.04e-04] | Train loss: 1.1609 acc: 0.6143 top5: 0.9567 | Val loss: 2.6088 acc: 0.2533 top5: 0.6933
2025-10-25 22:31:58,390  | INFO |  __main__ |  Epoch 17 | LRs [8.61e-05, 8.61e-05] | Train loss: 1.1323 acc: 0.6156 top5: 0.9444 | Val loss: 2.2593 acc: 0.3200 top5: 0.7333
2025-10-25 22:31:59,256  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.3200)
2025-10-25 22:38:03,731  | INFO |  __main__ |  Epoch 18 | LRs [6.90e-05, 6.90e-05] | Train loss: 1.0382 acc: 0.6341 top5: 0.9580 | Val loss: 2.6444 acc: 0.2889 top5: 0.6553
2025-10-25 22:44:29,778  | INFO |  __main__ |  Epoch 19 | LRs [5.44e-05, 5.44e-05] | Train loss: 0.9388 acc: 0.6712 top5: 0.9703 | Val loss: 2.2497 acc: 0.3467 top5: 0.7556
2025-10-25 22:44:30,713  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.3467)
2025-10-25 22:50:21,318  | INFO |  __main__ |  Epoch 20 | LRs [4.07e-05, 4.07e-05] | Train loss: 0.9847 acc: 0.6625 top5: 0.9567 | Val loss: 2.2650 acc: 0.3200 top5: 0.7867
2025-10-25 22:56:23,772  | INFO |  __main__ |  Epoch 21 | LRs [2.86e-05, 2.86e-05] | Train loss: 0.9127 acc: 0.7120 top5: 0.9679 | Val loss: 2.3467 acc: 0.3378 top5: 0.7378
2025-10-25 23:02:30,703  | INFO |  __main__ |  Epoch 22 | LRs [1.86e-05, 1.86e-05] | Train loss: 0.8483 acc: 0.7206 top5: 0.9753 | Val loss: 2.4964 acc: 0.3911 top5: 0.6756
2025-10-25 23:02:31,820  | INFO |  __main__ |  Saved improved checkpoint to models/checkpoints/sign_recognition/baseline_cnn_lstm.pt (val acc 0.3911)
2025-10-25 23:08:38,496  | INFO |  __main__ |  Epoch 23 | LRs [1.05e-05, 1.05e-05] | Train loss: 0.8536 acc: 0.6972 top5: 0.9716 | Val loss: 2.1606 acc: 0.3867 top5: 0.8044
2025-10-25 23:14:42,584  | INFO |  __main__ |  Epoch 24 | LRs [4.71e-06, 4.71e-06] | Train loss: 0.8198 acc: 0.7379 top5: 0.9753 | Val loss: 2.2175 acc: 0.3644 top5: 0.7289
2025-10-25 23:21:19,505  | INFO |  __main__ |  Epoch 25 | LRs [1.18e-06, 1.18e-06] | Train loss: 0.8643 acc: 0.7058 top5: 0.9703 | Val loss: 2.4079 acc: 0.3289 top5: 0.7422
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2025-10-25 23:22:43,877 | INFO | __main__ | Final validation accuracy: 0.3911 | Top-5: 0.6756
2025-10-25 23:22:43,878 | INFO | __main__ | Classification report:
                    precision    recall  f1-score   support

         1. Dog         1.00      0.25      0.40         4
         2. Cat         0.50      0.75      0.60         4
        3. Fish         0.67      0.50      0.57         4
       3. happy         0.26      1.00      0.42         5
       4. Bird         0.75      0.75      0.75         4
        4. sad         1.00      1.00      1.00         2
        40. I         1.00      0.20      0.33         5
      41. you         0.00      0.00      0.00         5
   42. T-Shirt         0.00      0.00      0.00         4
      42. he         0.00      0.00      0.00         5
     43. Pant         0.57      1.00      0.73         5
     43. she         0.50      0.20      0.29         5
    44. Shoes         0.00      0.00      0.00         4
      44. it         0.30      0.60      0.40         5
   45. Pocket         1.00      0.25      0.40         4
      45. we         0.00      0.00      0.00         5
  46. Clothing        1.00      0.75      0.86         4
46. you (plural)       0.00      0.00      0.00         5
     47. Red          1.00      0.25      0.40         5
    47. they          0.80      0.80      0.80         5
    48. Green         1.00      0.25      0.40         4
    48. Hello         0.75      0.60      0.67         5
     49. Blue         0.00      0.00      0.00         4
49. How are you       0.00      0.00      0.00         5
  5. Beautiful        1.00      1.00      1.00         2
      5. Cow          0.80      0.80      0.80         5
  50. Alright         1.00      0.60      0.75         5
   50. Yellow         0.00      0.00      0.00         4
    51. Brown         0.00      0.00      0.00         5
 55. Thank you        0.50      0.60      0.55         5
  56. Pleased         0.30      0.60      0.40         5
      58. Son         0.24      1.00      0.38         4
  59. Daughter        0.00      0.00      0.00         4
     6. Mouse         0.44      1.00      0.62         4
     6. Ugly          1.00      1.00      1.00         2
   60. Mother         0.00      0.00      0.00         4
   61. Father         0.00      0.00      0.00         4
   62. Parent         0.00      0.00      0.00         4
   66. Sunday         0.00      0.00      0.00         3
  67. Monday          1.00      0.67      0.80         3
    7. Horse          0.00      0.00      0.00         4
   73. Today          0.00      0.00      0.00         3
 74. Tomorrow         0.25      0.33      0.29         3
 75. Yesterday        0.43      1.00      0.60         3
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             49. Blue        0.00      0.00      0.00         4
       49. How are you       0.00      0.00      0.00         5
        5. Beautiful         1.00      1.00      1.00         2
             5. Cow          0.80      0.80      0.80         5
          50. Alright        1.00      0.60      0.75         5
          50. Yellow         0.00      0.00      0.00         5
           51. Brown         0.00      0.00      0.00         5
         55. Thank you       0.50      0.60      0.55         5
          56. Pleased        0.30      0.60      0.40         5
            58. Son          0.24      1.00      0.38         4
         59. Daughter        0.00      0.00      0.00         4
           6. Mouse          0.44      1.00      0.62         4
            6. Ugly          1.00      1.00      1.00         2
          60. Mother         0.00      0.00      0.00         4
          61. Father         0.00      0.00      0.00         4
          62. Parent         0.00      0.00      0.00         4
          66. Sunday         0.00      0.00      0.00         3
          67. Monday         1.00      0.67      0.80         3
           7. Horse          0.00      0.00      0.00         4
           73. Today         0.00      0.00      0.00         3
        74. Tomorrow         0.25      0.33      0.29         3
        75. Yesterday        0.43      1.00      0.60         3
           79. Child         0.14      0.25      0.18         4
           8. Animal         0.00      0.00      0.00         4
           80. Adult         0.50      0.50      0.50         4
          81. Friend         0.33      0.25      0.29         4
          82. Player         0.09      0.25      0.13         4
          83. Crowd          0.22      0.50      0.31         4
           92. Old           0.20      0.40      0.27         5
          93. young          0.80      0.80      0.80         5
          94. good           0.19      1.00      0.31         5
           95. bad           0.50      0.20      0.29         5

            accuracy                             0.39       225
           macro avg         0.41      0.41      0.36       225
        weighted avg         0.39      0.39      0.34       225

2025-10-25 23:22:43,878 | INFO | __main__ | Confusion matrix:
[[1 0 0 ... 0 0 0]
 [0 3 0 ... 0 0 0]
 [0 0 2 ... 0 0 0]
 ...
 [0 0 0 ... 4 1 0]
 [0 0 0 ... 0 5 0]
 [0 0 0 ... 0 4 1]]
Final validation accuracy: 0.3911 | Top-5: 0.6756
(mini6es) ⏱ 2h21m45s ~ ▪ (n)/workhub/python/project/sin6es(mini)
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