

2021-03-30 16:07:19.986912: I tensorflow/core/platform/cpu_feature_guard.cc:142] This TensorFlow binary is optimized with oneAPI Deep Neural Network Library (oneDNN) to use the following CPU instructions in performance-critical operations: AVX AVX2

To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.

Epoch: 0001 train_loss= 2.99573 train_acc= 0.04478 val_loss= 2.99094 val_acc= 0.61185 time= 27.45834
Epoch: 0002 train_loss= 2.99079 train_acc= 0.65246 val_loss= 2.97775 val_acc= 0.46508 time= 26.40630
Epoch: 0003 train_loss= 2.97727 train_acc= 0.51282 val_loss= 2.95899 val_acc= 0.43501 time= 26.52894
Epoch: 0004 train_loss= 2.95789 train_acc= 0.47992 val_loss= 2.93367 val_acc= 0.44386 time= 26.54855
Epoch: 0005 train_loss= 2.93189 train_acc= 0.48905 val_loss= 2.90099 val_acc= 0.46331 time= 27.90581
Epoch: 0006 train_loss= 2.89766 train_acc= 0.50349 val_loss= 2.86079 val_acc= 0.47569 time= 27.49399
Epoch: 0007 train_loss= 2.85601 train_acc= 0.51714 val_loss= 2.81318 val_acc= 0.48895 time= 27.16416
Epoch: 0008 train_loss= 2.80600 train_acc= 0.53422 val_loss= 2.75829 val_acc= 0.50221 time= 26.48410
Epoch: 0009 train_loss= 2.74748 train_acc= 0.55151 val_loss= 2.69610 val_acc= 0.52255 time= 26.71250
Epoch: 0010 train_loss= 2.68140 train_acc= 0.56653 val_loss= 2.62649 val_acc= 0.53493 time= 27.47476
Epoch: 0011 train_loss= 2.60642 train_acc= 0.58941 val_loss= 2.54940 val_acc= 0.57118 time= 28.12175
Epoch: 0012 train_loss= 2.52512 train_acc= 0.61151 val_loss= 2.46496 val_acc= 0.59063 time= 28.66174
Epoch: 0013 train_loss= 2.43436 train_acc= 0.63851 val_loss= 2.37337 val_acc= 0.62423 time= 29.62934
Epoch: 0014 train_loss= 2.33813 train_acc= 0.66915 val_loss= 2.27519 val_acc= 0.66755 time= 27.46915
Epoch: 0015 train_loss= 2.23778 train_acc= 0.70677 val_loss= 2.17130 val_acc= 0.71088 time= 26.11165
Epoch: 0016 train_loss= 2.12999 train_acc= 0.73583 val_loss= 2.06284 val_acc= 0.74182 time= 26.13576
Epoch: 0017 train_loss= 2.01727 train_acc= 0.77413 val_loss= 1.95123 val_acc= 0.77454 time= 26.12226
Epoch: 0018 train_loss= 1.90478 train_acc= 0.80664 val_loss= 1.83806 val_acc= 0.79399 time= 26.19348
Epoch: 0019 train_loss= 1.78831 train_acc= 0.82863 val_loss= 1.72482 val_acc= 0.81786 time= 25.47011
Epoch: 0020 train_loss= 1.67474 train_acc= 0.84886 val_loss= 1.61298 val_acc= 0.83820 time= 25.43138
Epoch: 0021 train_loss= 1.56065 train_acc= 0.86556 val_loss= 1.50387 val_acc= 0.85588 time= 26.15312
Epoch: 0022 train_loss= 1.44716 train_acc= 0.88039 val_loss= 1.39881 val_acc= 0.86737 time= 25.46307
Epoch: 0023 train_loss= 1.33766 train_acc= 0.88510 val_loss= 1.29904 val_acc= 0.87268 time= 26.22336
Epoch: 0024 train_loss= 1.24180 train_acc= 0.88981 val_loss= 1.20534 val_acc= 0.88152 time= 25.60454
Epoch: 0025 train_loss= 1.14708 train_acc= 0.89885 val_loss= 1.11793 val_acc= 0.88506 time= 26.36534

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Epoch: 0025 train_loss= 1.14708 train_acc= 0.89885 val_loss= 1.11793 val_acc= 0.88506 time= 26.36534
Epoch: 0026 train_loss= 1.06447 train_acc= 0.90062 val_loss= 1.03706 val_acc= 0.88859 time= 26.33023
Epoch: 0027 train_loss= 0.98161 train_acc= 0.90386 val_loss= 0.96290 val_acc= 0.89302 time= 25.62454
Epoch: 0028 train_loss= 0.90469 train_acc= 0.90720 val_loss= 0.89551 val_acc= 0.89478 time= 29.27076
Epoch: 0029 train_loss= 0.84007 train_acc= 0.90788 val_loss= 0.83437 val_acc= 0.89567 time= 28.77084
Epoch: 0030 train_loss= 0.77421 train_acc= 0.91044 val_loss= 0.77920 val_acc= 0.90009 time= 25.86131
Epoch: 0031 train_loss= 0.72140 train_acc= 0.91250 val_loss= 0.72939 val_acc= 0.90097 time= 25.70926
Epoch: 0032 train_loss= 0.67347 train_acc= 0.91505 val_loss= 0.68475 val_acc= 0.90363 time= 26.33064
Epoch: 0033 train_loss= 0.62748 train_acc= 0.91810 val_loss= 0.64485 val_acc= 0.90628 time= 25.47989
Epoch: 0034 train_loss= 0.58264 train_acc= 0.92291 val_loss= 0.60946 val_acc= 0.90628 time= 25.67265
Epoch: 0035 train_loss= 0.54302 train_acc= 0.92792 val_loss= 0.57769 val_acc= 0.90451 time= 26.12516
Epoch: 0036 train_loss= 0.51210 train_acc= 0.92988 val_loss= 0.54887 val_acc= 0.90628 time= 25.73283
Epoch: 0037 train_loss= 0.47940 train_acc= 0.93067 val_loss= 0.52345 val_acc= 0.90451 time= 25.98260
Epoch: 0038 train_loss= 0.45425 train_acc= 0.92949 val_loss= 0.50320 val_acc= 0.90805 time= 25.54518
Epoch: 0039 train_loss= 0.42715 train_acc= 0.93165 val_loss= 0.48563 val_acc= 0.90893 time= 26.48958
Epoch: 0040 train_loss= 0.40268 train_acc= 0.93528 val_loss= 0.47048 val_acc= 0.91335 time= 25.95638
Epoch: 0041 train_loss= 0.38099 train_acc= 0.93833 val_loss= 0.45564 val_acc= 0.91335 time= 25.60664
Epoch: 0042 train_loss= 0.35770 train_acc= 0.94225 val_loss= 0.44026 val_acc= 0.91424 time= 25.93554
Epoch: 0043 train_loss= 0.34138 train_acc= 0.94147 val_loss= 0.42379 val_acc= 0.91600 time= 25.91499
Epoch: 0044 train_loss= 0.32373 train_acc= 0.94550 val_loss= 0.40925 val_acc= 0.91689 time= 26.42430
Epoch: 0045 train_loss= 0.30724 train_acc= 0.94844 val_loss= 0.39627 val_acc= 0.91866 time= 26.01419
Epoch: 0046 train_loss= 0.29377 train_acc= 0.94874 val_loss= 0.38502 val_acc= 0.91777 time= 25.66061
Epoch: 0047 train_loss= 0.27972 train_acc= 0.95178 val_loss= 0.37476 val_acc= 0.91866 time= 25.97511
Epoch: 0048 train_loss= 0.26377 train_acc= 0.95355 val_loss= 0.36557 val_acc= 0.91954 time= 26.09646
Epoch: 0049 train_loss= 0.25317 train_acc= 0.95522 val_loss= 0.35611 val_acc= 0.92131 time= 25.74395
Epoch: 0050 train_loss= 0.24311 train_acc= 0.95699 val_loss= 0.34708 val_acc= 0.92308 time= 25.91285
Epoch: 0051 train_loss= 0.23108 train_acc= 0.95856 val_loss= 0.33912 val_acc= 0.92396 time= 26.63844
Epoch: 0052 train_loss= 0.22246 train_acc= 0.96170 val_loss= 0.33231 val_acc= 0.92219 time= 25.42155
Epoch: 0053 train_loss= 0.21429 train_acc= 0.96131 val_loss= 0.32586 val_acc= 0.92131 time= 25.76078
Epoch: 0054 train_loss= 0.20506 train_acc= 0.96425 val_loss= 0.32004 val_acc= 0.92219 time= 25.54603
Epoch: 0055 train_loss= 0.19670 train_acc= 0.96474 val_loss= 0.31461 val_acc= 0.92308 time= 25.92796
Epoch: 0056 train_loss= 0.18947 train_acc= 0.96612 val_loss= 0.30961 val_acc= 0.92396 time= 26.27360
Epoch: 0057 train_loss= 0.18221 train_acc= 0.96641 val_loss= 0.30546 val_acc= 0.92396 time= 25.35455
Epoch: 0058 train_loss= 0.17519 train_acc= 0.96789 val_loss= 0.30215 val_acc= 0.92396 time= 25.47594
Epoch: 0059 train_loss= 0.16895 train_acc= 0.97034 val_loss= 0.29914 val_acc= 0.92396 time= 25.43969
Epoch: 0060 train_loss= 0.16331 train_acc= 0.97162 val_loss= 0.29659 val_acc= 0.92485 time= 26.71649
Epoch: 0061 train_loss= 0.15764 train_acc= 0.97211 val_loss= 0.29400 val_acc= 0.92573 time= 25.90200
Epoch: 0062 train_loss= 0.15225 train_acc= 0.97289 val_loss= 0.29135 val_acc= 0.92573 time= 25.60750
Epoch: 0063 train_loss= 0.14737 train_acc= 0.97535 val_loss= 0.28880 val_acc= 0.92838 time= 25.97399
Epoch: 0064 train_loss= 0.14190 train_acc= 0.97731 val_loss= 0.28657 val_acc= 0.92838 time= 25.80799
Epoch: 0065 train_loss= 0.13816 train_acc= 0.97721 val_loss= 0.28491 val_acc= 0.92661 time= 25.72074
Epoch: 0066 train_loss= 0.13336 train_acc= 0.97879 val_loss= 0.28333 val_acc= 0.92661 time= 25.76622
Epoch: 0067 train_loss= 0.12992 train_acc= 0.97751 val_loss= 0.28147 val_acc= 0.92838 time= 25.56266
Epoch: 0068 train_loss= 0.12511 train_acc= 0.98144 val_loss= 0.27987 val_acc= 0.92927 time= 25.48745
Epoch: 0069 train_loss= 0.12073 train_acc= 0.97947 val_loss= 0.27864 val_acc= 0.92838 time= 25.74021
Epoch: 0070 train_loss= 0.11667 train_acc= 0.98055 val_loss= 0.27708 val_acc= 0.92927 time= 25.82935
Epoch: 0071 train_loss= 0.11534 train_acc= 0.98095 val_loss= 0.27534 val_acc= 0.93104 time= 25.74739
Epoch: 0072 train_loss= 0.11171 train_acc= 0.98203 val_loss= 0.27400 val_acc= 0.93192 time= 25.91839
Epoch: 0073 train_loss= 0.10894 train_acc= 0.98252 val_loss= 0.27297 val_acc= 0.93015 time= 26.15021
Epoch: 0074 train_loss= 0.10403 train_acc= 0.98487 val_loss= 0.27187 val_acc= 0.93015 time= 26.57306
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Epoch: 0074 train_loss= 0.10403 train_acc= 0.98487 val_loss= 0.27187 val_acc= 0.93015 time= 26.57306
Epoch: 0075 train_loss= 0.10209 train_acc= 0.98537 val_loss= 0.27067 val_acc= 0.93015 time= 25.50765
Epoch: 0076 train_loss= 0.09836 train_acc= 0.98527 val_loss= 0.26927 val_acc= 0.93015 time= 25.73738
Epoch: 0077 train_loss= 0.09600 train_acc= 0.98566 val_loss= 0.26811 val_acc= 0.93104 time= 25.25880
Epoch: 0078 train_loss= 0.09259 train_acc= 0.98566 val_loss= 0.26735 val_acc= 0.93192 time= 25.53721
Epoch: 0079 train_loss= 0.09042 train_acc= 0.98772 val_loss= 0.26684 val_acc= 0.93280 time= 26.04638
Epoch: 0080 train_loss= 0.08879 train_acc= 0.98733 val_loss= 0.26640 val_acc= 0.93280 time= 25.51687
Epoch: 0081 train_loss= 0.08658 train_acc= 0.98772 val_loss= 0.26584 val_acc= 0.93192 time= 26.05179
Epoch: 0082 train_loss= 0.08474 train_acc= 0.98880 val_loss= 0.26545 val_acc= 0.93192 time= 27.40711
Epoch: 0083 train_loss= 0.08096 train_acc= 0.98880 val_loss= 0.26514 val_acc= 0.93280 time= 26.87298
Epoch: 0084 train_loss= 0.07959 train_acc= 0.98821 val_loss= 0.26453 val_acc= 0.93104 time= 26.83268
Epoch: 0085 train_loss= 0.07757 train_acc= 0.98890 val_loss= 0.26403 val_acc= 0.93104 time= 28.24832
Epoch: 0086 train_loss= 0.07520 train_acc= 0.99136 val_loss= 0.26337 val_acc= 0.93015 time= 29.18734
Epoch: 0087 train_loss= 0.07309 train_acc= 0.99086 val_loss= 0.26279 val_acc= 0.93015 time= 25.38298
Epoch: 0088 train_loss= 0.07189 train_acc= 0.98988 val_loss= 0.26176 val_acc= 0.92838 time= 25.97301
Epoch: 0089 train_loss= 0.06995 train_acc= 0.99116 val_loss= 0.26099 val_acc= 0.92927 time= 25.60624
Epoch: 0090 train_loss= 0.06847 train_acc= 0.99106 val_loss= 0.26074 val_acc= 0.92927 time= 25.86568
Epoch: 0091 train_loss= 0.06757 train_acc= 0.99116 val_loss= 0.26097 val_acc= 0.92927 time= 25.97807
Epoch: 0092 train_loss= 0.06569 train_acc= 0.99244 val_loss= 0.26150 val_acc= 0.93015 time= 25.68928
Epoch: 0093 train_loss= 0.06396 train_acc= 0.99204 val_loss= 0.26135 val_acc= 0.92927 time= 25.70553
Epoch: 0094 train_loss= 0.06319 train_acc= 0.99234 val_loss= 0.26107 val_acc= 0.92750 time= 25.84448
Epoch: 0095 train_loss= 0.06119 train_acc= 0.99303 val_loss= 0.26054 val_acc= 0.92927 time= 26.24642
Epoch: 0096 train_loss= 0.05929 train_acc= 0.99263 val_loss= 0.25982 val_acc= 0.93015 time= 26.39261
Epoch: 0097 train_loss= 0.05782 train_acc= 0.99381 val_loss= 0.25903 val_acc= 0.93104 time= 27.46300
Epoch: 0098 train_loss= 0.05703 train_acc= 0.99430 val_loss= 0.25850 val_acc= 0.93104 time= 28.48921
Epoch: 0099 train_loss= 0.05558 train_acc= 0.99411 val_loss= 0.25785 val_acc= 0.93015 time= 29.26806
Epoch: 0100 train_loss= 0.05469 train_acc= 0.99332 val_loss= 0.25724 val_acc= 0.93015 time= 27.23673
Epoch: 0101 train_loss= 0.05387 train_acc= 0.99401 val_loss= 0.25708 val_acc= 0.93015 time= 27.77728
Epoch: 0102 train_loss= 0.05273 train_acc= 0.99391 val_loss= 0.25701 val_acc= 0.93015 time= 28.98148
Epoch: 0103 train_loss= 0.05194 train_acc= 0.99430 val_loss= 0.25757 val_acc= 0.93104 time= 30.81959
Epoch: 0104 train_loss= 0.05114 train_acc= 0.99450 val_loss= 0.25814 val_acc= 0.93015 time= 29.68281
Epoch: 0105 train_loss= 0.05006 train_acc= 0.99489 val_loss= 0.25879 val_acc= 0.93015 time= 26.71297
Early stopping...
Optimization Finished!
Test set results: cost= 0.50140 accuracy= 0.86352 time= 8.99611
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