

Dataset Background:

The dataset was created with the help of more than 5,400 unique crowd actors.

Developers like you have successfully created classification models based on the training set and found that they perform well on the validation set. Running their models on the test set, they can achieve scores of up to 91 percent.

The video data is provided as one large TGZ archive, split into parts of 10 GB maximum. The total download size is 19.4 GB. The archive contains webm-files, using the VP9 codec, with a height of 240px. Files are numbered from 1 to 220847.

For each video in the training and validation sets there is an object annotation in addition to the video label, if applicable. For example, for a label like "Putting [something] onto [something]," there is also an annotated version, such as "Putting a cup onto a table." In total, there are 318,572 annotations involving 30,408 unique objects.

Dataset Instructions:

In order to extract the TGZ archive, the files must be downloaded and concatenated in the right order. Only then they can be extracted. Unzip the downloaded zip files separately and then run the given command in the documentation to extract all the video files.

1. `unzip 20bn-something-something-v2-\\?.zip`
2. `cat 20bn-something-something-v2-?? | tar -xvzf -`

Dataset Classes:

Unfolding something	1266
Pushing something from left to right	3442
Attaching something to something	1227
Something falling like a rock	2079
Something falling like a feather or paper	1858
Bending something so that it deforms	798
Pretending to poke something	754
Pulling something from left to right	1908
Pretending to put something onto something	740
Scooping something up with something	1123
Putting something next to something	2431
Poking a stack of something so the stack collapses	367
Showing something next to something	1185
Poking something so that it falls over	892
Pouring something onto something	403

Putting something and something on the table	1353
Bending something until it breaks	718
Putting something underneath something	748
Squeezing something	2631
Trying to bend something unbendable so nothing happens	991
Digging something out of something	522
Moving part of something	905
Moving something towards the camera	994
Dropping something behind something	991
Holding something in front of something	2203
Something colliding with something and both come to a halt	547
Spilling something onto something	474
Pretending to put something on a surface	1644
Pretending to throw something	1019
Sprinkling something onto something	540
Tilting something with something on it until it falls off	1272
Pulling something onto something	343
Pulling something from right to left	1886
Pulling two ends of something but nothing happens	643
Turning the camera upwards while filming something	1021
Pretending to sprinkle air onto something	543
Poking something so lightly that it doesn't or almost doesn't move	2430
Poking a hole into something soft	258
Pretending to take something out of something	1045
Moving something and something closer to each other	2298
Putting something that can't roll onto a slanted surface, so it slides down	442
Putting something that cannot actually stand upright upright on the table, so it falls on its side	837
Moving something and something so they pass each other	582
Moving something up	3750
Moving something across a surface without it falling down	832
Moving something down	3242
Pulling two ends of something so that it gets stretched	438
Letting something roll down a slanted surface	876
Pretending to put something behind something	746
Pushing something so that it slightly moves	2418
Dropping something onto something	1623
Throwing something in the air and catching it	1177
Putting something onto a slanted surface but it doesn't glide down	183
Putting something on a flat surface without letting it roll	553

Moving away from something with your camera	1199
Putting something in front of something	1094
Pushing something from right to left	3195
Turning the camera left while filming something	1239
Putting something onto something else that cannot support it so it falls down	442
Pushing something so it spins	845
Tipping something with something in it over, so something in it falls out	447
Showing something behind something	2315
Putting something on a surface	4081
Pulling something from behind of something	586
Touching (without moving) part of something	1763
Laying something on the table on its side, not upright	950
Putting number of something onto something	1180
Turning the camera downwards while filming something	976
Taking something from somewhere	1290
Lifting something up completely, then letting it drop down	1851
Pretending to scoop something up with something	389
Dropping something next to something	1232
Twisting something	1131
Throwing something onto a surface	1035
Pretending to turn something upside down	888
Holding something behind something	1374
Moving something closer to something	1426
Moving something and something so they collide with each other	577
Putting something into something	2783
Putting something upright on the table	980
Dropping something in front of something	1131
Picking something up	1456
Pouring something into something until it overflows	352
Pushing something onto something	419
Pretending to open something without actually opening it	1911
Pretending to put something underneath something	373
Pulling something out of something	736
Showing a photo of something to the camera	916
Holding something next to something	1893
Putting something behind something	1428
Lifting a surface with something on it until it starts sliding down	405
Plugging something into something but pulling it right out as you remove your hand	1176

Moving something across a surface until it falls down	883
Failing to put something into something because something does not fit	353
Poking something so that it spins around	185
Pouring something into something	1530
Showing that something is empty	2209
Lifting up one end of something without letting it drop down	1613
Pretending to squeeze something	856
Throwing something	2626
Pushing something so that it falls off the table	2240
Pretending or trying and failing to twist something	404
Pretending to put something next to something	1297
Wiping something off of something	873
Pushing something off of something	687
Pushing something with something	1804
Letting something roll along a flat surface	1163
Pretending to pick something up	1969
Pretending or failing to wipe something off of something	490
Showing that something is inside something	1547
Removing something, revealing something behind	1069
Letting something roll up a slanted surface, so it rolls back down	441
Moving something and something away from each other	2062
Putting something onto something	1850
Pretending to close something without actually closing it	1122
Tearing something just a little bit	2025
Showing something on top of something	1301
Something being deflected from something	492
Covering something with something	3530
Moving something away from the camera	986
Trying but failing to attach something to something because it doesn't stick	660
Putting something on the edge of something so it is not supported and falls down	638
Spilling something behind something	143
Holding something over something	1804
Twisting (wringing) something wet until water comes out	408
Taking something out of something	2259
Piling something up	1145
Opening something	1869
Trying to pour something into something, but missing so it spills next to it	265
Lifting up one end of something, then letting it drop down	1850

Spinning something so it continues spinning	1168
Spreading something onto something	535
Poking a hole into some substance	115
Stacking number of something	1463
Poking a stack of something without the stack collapsing	276
Pretending to spread air onto something	225
Uncovering something	3004
Spinning something that quickly stops spinning	1587
Pretending to be tearing something that is not tearable	1256
Putting something similar to other things that are already on the table	2339
Rolling something on a flat surface	1773
Pretending to take something from somewhere	1437
Taking one of many similar things on the table	2969
Holding something	1851
Folding something	1542
Throwing something against something	1475
Throwing something in the air and letting it fall	1038
Pretending to put something into something	1165
Showing something to the camera	1061
Something colliding with something and both are being deflected	653
Putting something, something and something on the table	1211
Plugging something into something	2252
Lifting something up completely without letting it drop down	1906
Moving something away from something	1352
Tipping something over	896
Pretending to pour something out of something, but something is empty	445
Turning the camera right while filming something	1239
Turning something upside down	2943
Pulling two ends of something so that it separates into two pieces	313
Tilting something with something on it slightly so it doesn't fall down	829
Hitting something with something	2234
Lifting a surface with something on it but not enough for it to slide down	268
Approaching something with your camera	1349
Closing something	1482
Lifting something with something on it	2016
Putting something that can't roll onto a slanted surface, so it stays where it is	447
Spilling something next to something	240

Pouring something out of something	514
Poking something so it slightly moves	1599
Tearing something into two pieces	2849
Pushing something so that it almost falls off but doesn't	1321
Burying something in something	687
Stuffing something into something	1998
Dropping something into something	1222