

Data Appendix:

american-sign-language-letters-subdir.zip

- This is a zip file that has around 50 to 90 pictures for every letter in the alphabet
- Unit of Observation: photo of hand depicted an ASL sign language letter
- The folders after unzipping the file
 - 'Subdir' has every letter in the alphabet
 - 'A' has 75 images of hands depicting the letter A in ASL
 - 'B' has 51 images of hands depicting the letter B in ASL
 - 'C' has 61 images of hands depicting the letter C in ASL
 - 'D' has 70 images of hands depicting the letter D in ASL
 - 'E' has 67 images of hands depicting the letter E in ASL
 - 'F' has 70 images of hands depicting the letter F in ASL
 - 'G' has 70 images of hands depicting the letter G in ASL
 - 'H' has 63 images of hands depicting the letter H in ASL
 - 'I' has 82 images of hands depicting the letter I in ASL
 - 'J' has 90 images of hands depicting the letter J in ASL
 - 'K' has 61 images of hands depicting the letter K in ASL
 - 'L' has 76 images of hands depicting the letter L in ASL
 - 'M' has 61 images of hands depicting the letter M in ASL
 - 'N' has 67 images of hands depicting the letter N in ASL
 - 'O' has 64 images of hands depicting the letter O in ASL
 - 'P' has 59 images of hands depicting the letter P in ASL
 - 'Q' has 66 images of hands depicting the letter Q in ASL
 - 'R' has 57 images of hands depicting the letter R in ASL
 - 'S' has 76 images of hands depicting the letter S in ASL
 - 'T' has 53 images of hands depicting the letter T in ASL
 - 'U' has 57 images of hands depicting the letter U in ASL
 - 'V' has 66 images of hands depicting the letter V in ASL
 - 'W' has 65 images of hands depicting the letter W in ASL
 - 'X' has 68 images of hands depicting the letter X in ASL
 - 'Y' has 58 images of hands depicting the letter Y in ASL
 - 'Z' has 74 images of hands depicting the letter Z in ASL
- The file is unzipped within the code into a folder named data, which contains a subdir folder. Inside subdir, there are individual folders for each letter of the alphabet.
- The images are split into training and test sets, with 15% of the data randomly assigned to the test set. The remaining 85% is used for training. Within the training set, 20% of the images are used for validation, and the remaining 80% are used to train the model.
- Each image is cleaned.