

# Potential Datasets

Listed below are some potential datasets that could be used for our project idea of identifying shoes using image recognition. Note that some datasets contain a small number of data points, however we can combine them with other datasets so that we have enough instances to train and test the model effectively.

It isn't likely that we'll need a lot of data since we're leaning towards using a transfer learning model which is a model that has already been trained on a similar task. All we'll need to do is fine-tune it with some data relevant to our task such that it can perform shoe identification effectively rather than having to build something from scratch (which would require a lot more data).

If we still need more data however, we could consider scraping images from online sources such as google images or e-commerce websites.

- **Nike, Adidas Shoes for Image Classification Dataset**

This dataset can be used to build a CNN model that can classify if a shoe is an Adidas or Nike brand.

The images were pulled from bing, 400 images of each class were downloaded and then the dataset was trimmed to 300 (some unrelated images were removed in the process of compiling the dataset).

Link: <https://www.kaggle.com/datasets/ifeanyinneji/nike-adidas-shoes-for-image-classification-dataset>

- **Nike, Adidas and Converse Shoes Images**

The dataset contains 2 folders: one with the test data and the other one with train data.

The test dataset contains 114 images and the training dataset contains 711.

The images have a resolution of 240x240 pixels in RGB color model.

Both the folders contain 3 classes:

- Adidas
- Converse
- Nike

Link: <https://www.kaggle.com/datasets/die9origephit/nike-adidas-and-converse-imaged>

- **Shoes Classification Dataset | 13k Images |**

This is a Shoes Classification data, the data contains 5 Classes, these classes are:

- Ballet Flat
- Boat
- Brogue
- Clog
- Sneaker

Link: <https://www.kaggle.com/datasets/utkarshsaxenadn/shoes-classification-dataset-13k-images>

- **Shoe Dataset**

This dataset consists of 6 classes of shoes: boots, sneakers, flip flops, loafers, sandals, and soccer shoes. It contains 249 images of each shoe type. The size of the images is variable but the format of each file is jpeg.

This dataset was acquired by scraping Yahoo Images and Unsplash using a Python script created by me. I took the API which fetches the images for each query and wrote a script to get the images.

The dataset contains varied angles of shoes, different scenarios in which shoes are present, and pretty much every variation that you can think of while working on a classification dataset.

Link: <https://www.kaggle.com/datasets/noobyogi0100/shoe-dataset>

- **UT Zappos50K**

UT Zappos50K (UT-Zap50K) is a large shoe dataset consisting of 50,025 catalog images collected from Zappos.com. The images are divided into 4 major categories — shoes, sandals, slippers, and boots — followed by functional types and individual brands. The shoes are centered on a white background and pictured in the same orientation for convenient analysis.

Link: <https://vision.cs.utexas.edu/projects/finegrained/utzap50k/>