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# Convulation Neural Network

Image Classification of Shoe Categories for E-Commerce Using Deep Learning

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## Project Pointers

- E-commerce has rapidly grown and their business strategies are completely based on user actions and user experiences.
- Although it is completely based on users, we should also not forget to say that there is a technology bridge in between users and growth in business.
- It may be Machine Learning or Deep Learning.
- Companies apply many image classification techniques on data to improve their catalog and give best suggestions to the users.
- They need accurate product classification on their platforms for better user experience.
- But when you talk about products, there exists a huge variety and classifying within varieties is really challenging.
- As a Deep Learning engineer, you should always try cracking these kinds of challenges by classifying things within a product itself.

# Goals

Given the images of a product with multiple categories, train a model which can classify the type of a product.

# Data Description

Data is all about images of shoes with multiple categories and data is collected from a popular Ecommerce site.

Data set consists of two folders train and test.

### DataSet

Train set consists of images belonging to 3 different categories of shoes in 3 different folders: Boots, Sandals and Slippers.

Test set consists of images belonging to all 3 categories of shoes into a single folder.

#### Instructions

Train set should be used to feed the model.

Test set should be used to predict labels for test data.

# **Evaluation Criteria**

The evaluation metric for this problem statement is the Accuracy score where each shoe category is matched with the actual shoe label.