

Dermnet Application

Detecting disease with Machine Learning Based App

Dataset Information

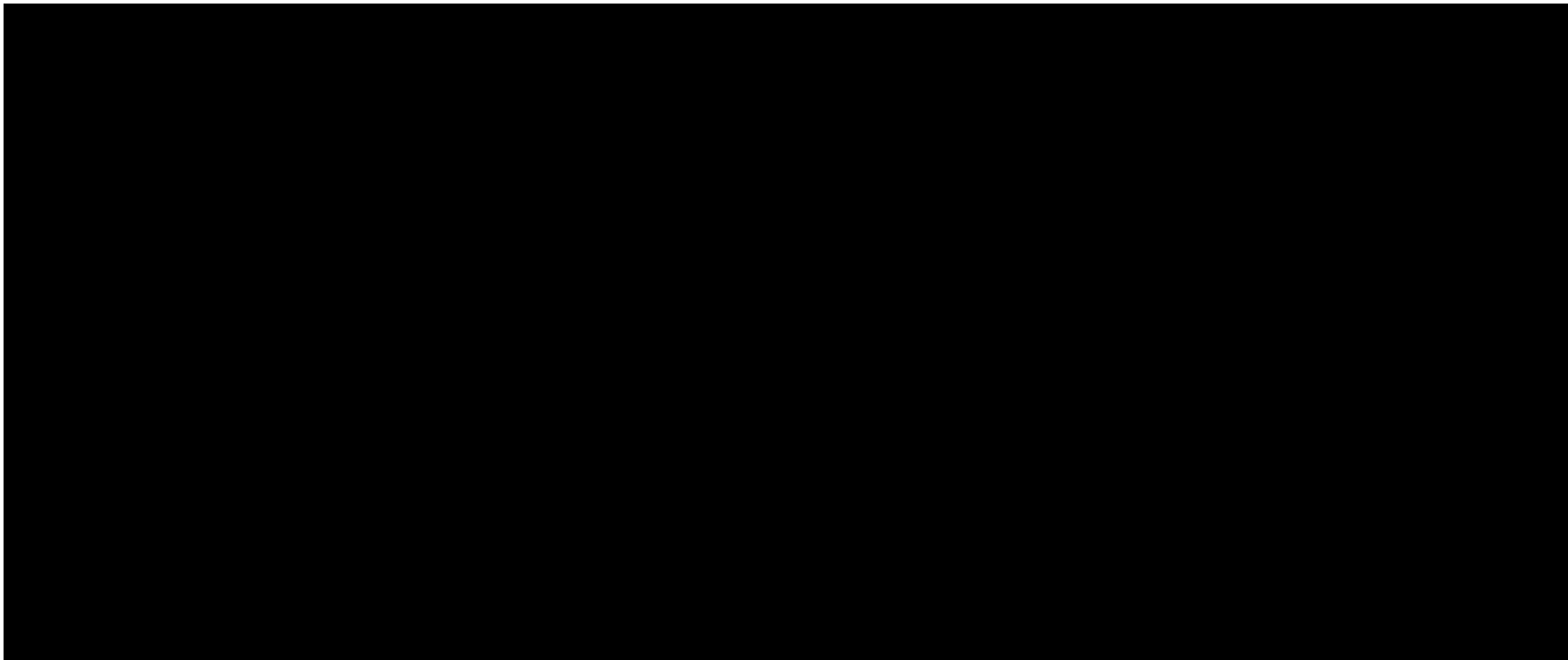
The dataset consists of 23 skin disease information, containing various classes

- Acne
- Eczema
- Melanoma.....

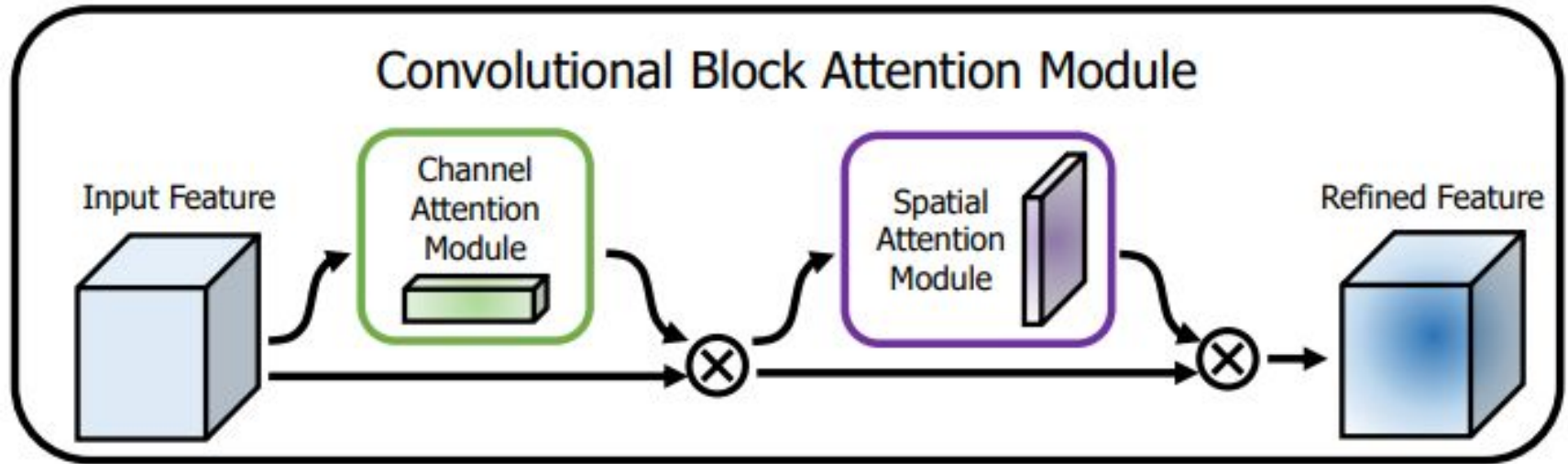
The goal of the project is to develop machine learning models to detect model for the skin disease and deploy lite version of that on android device via android application.

Dataset Preparation and Final Output

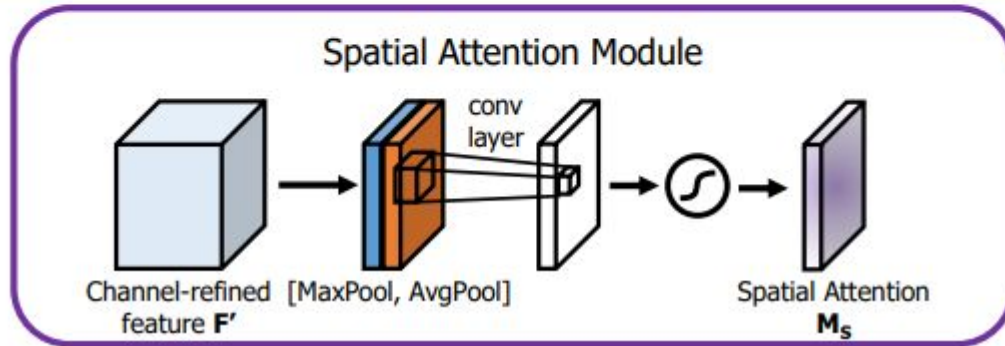
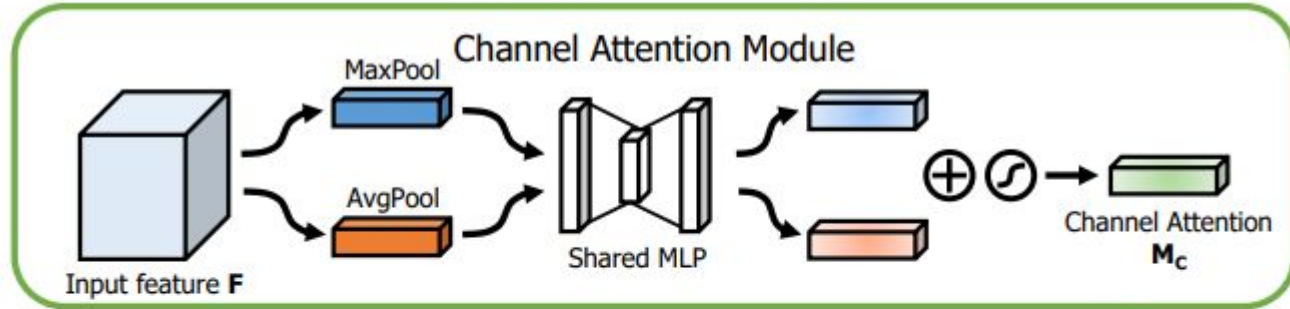
Annotated dataset for every disease have been prepared using [roboflow](#) and is uploaded to [google drive](#).



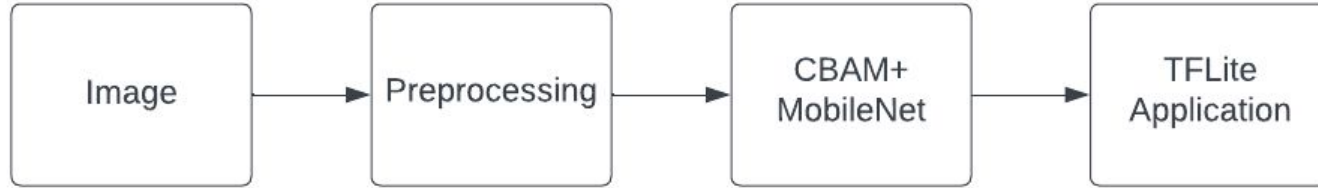
CBAM Architecture



Spatial Attention and Channel Attention



Pipeline



Since color is useful in detecting disease we will be storing the color information as well. Preprocessing includes resizing the images, random cropping, affine transform, shear transform and rotation.

CBAM has been added to Mobile Net, which boosts the accuracy by almost 5%

The overall accuracy obtained for the entire architecture is almost 68%.