# Invasive Species Kaggle challange

## Challange

The goal of the challenge was to classify images into 1 of 2 categories. The images showed various plants, either invasive or non-invasive species. For this, a training set of images were available, and a model need to be trained to make as accurate predictions as possible for the test set.

## Pre-processing

The images were cropped into two in order to double the size of the training set, and resized to 244\*244\*3 in order to accommodate the available resources, while keeping them on the hard drive.

## Model

The model used in the challenge was a modified VGG network trained using the Keras framework. The training was done using generators and min-batches in order to fit everything into the memory.

## Performance

At the end of the training, the model achieved a 99.35% performance on the validation set.

## Possible improvements

Since training a model is very costly, an easier way to approach the challenge would have been to use transfer learning and retrain only the last layer of an already trained model. This was the method used by the person achieving 1st place on the challenge.