1 . OVERVIEW

After many years of professional working with racing pigeons and talking to very influential and world-famous colleagues about the theory of the eye (in pigeon eye you can see if pigeon is good or bad), I came up with the idea to test this theory in the project. Data was used with the consent of the auction house EPW (European pigeon website) from Netherlands, which is also the owner of the photographs.

The goal of the project is classification of pigeons as good or bad **based on the RGB *PICTURE* of the eye**. Training data were separated into two classes (good and bad) based on the **results that pigeons achieved in competitions**, then I made a model that predicts which class a pigeon belongs to (good or bad) based on the photo of the eye. The theory of the eye has been known for the last 50 years and has reached its peak in the last 10 years.

In addition to the pigeon photograph, the image of the eye becomes unavoidable at **auctions**, so this model can be used at every auction. The thing that makes this theory even more interesting is the fact that pigeons achieve higher prices at auctions every year (the highest price for one pigeon at auction in the year 2019 was $ 1.4 million).

2. OUTCOME

After training of the model, test set is classified and the result is obtained. The result shows the accuracy of **87.5%**.

3. APPLICATION

The application of this idea is multiple. With this model it can be determined whether the pigeon is good or not. That can drastically change its **value at auctions**. Since there is a big offer at auctions, we can find a good pigeon for a low price and also avoid purchasing expensive pigeons if it is determined that they are not good.