**Project Proposal**

**Project Title**:Image Classification with convolutional neural network: Dogs Vs Cats

**Research Objectives**:

This Deep Learning project introduces you to how to build an image classifier. This project takes The Asirra (cats vs dogs) dataset for training and testing the neural network.

**Research Question**:

1. How to create a neural network for image classification
2. How to prepare the dataset for training and testing
3. How to visualize the dataset
4. How to save the model
5. How to test our model performance on custom data
6. How to create a GUI for the execution of deep learning project

### The Asirra (Dogs VS Cats) dataset:

The Asirra (animal species image recognition for restricting access) dataset was introduced in 2013 for a machine learning competition (<https://www.kaggle.com/c/dogs-vs-cats/data)>. The dataset includes 25,000 images with equal numbers of labels for cats and dogs.

https://data-flair.training/blogs/deep-learning-project-ideas/