Flower Recognition using Convolutional Neural Networks

Overview

This project aims to classify flower images into five distinct categories: daisy, tulip, dandelion, rose, and sunflower. The dataset consists of 4242 images of flowers (320x240 pixels), which are used to train and evaluate a Convolutional Neural Network (CNN) model built with Python.

Objective

The primary objective is to develop a machine learning model capable of accurately identifying flower types based on their images. The model is trained to learn unique features of each flower category and make precise predictions on unseen test data.

Dataset

The dataset used for training and testing the model is available on Kaggle here. It comprises high-quality flower images categorized into five classes, each labelled with its respective flower type.

Technologies Used

- Programming Language: Python
- Libraries: TensorFlow, Keras, OpenCV, NumPy, Matplotlib
- Machine Learning Algorithms: Convolutional Neural Networks (CNN)