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**Image Classification of the Flower Species Identification using Machine Learning**

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**Abstract**

Image classification has become one of the key use-cases for demonstrating machine learning. The proposed work will try to classify the given input image of flower species, based on the dataset provided. And it produces an output with the classification of flower in the input image. Flower identification systems are prominently used nowadays. Although modern search engines give mechanisms for visually searching for a query image containing a flower, robustness is lacking due to the intra-class variation among millions of flowers species worldwide. Therefore, a Machine Learning method using Convolution Neural Networks is used in this proposed research work to identify highly accurate flower species. The flower image extraction function is performed using a Pre-Trained Network Extraction of Complex features. On top of that, a machine learning classifier such as Logistic Regression or Random Forest is used to produce a higher precision score. This approach helps to reduce the system requirements required to conduct a Convolution Neural Networks (CNN) to compute the intensive training task.

**Keywords:**

Convolution Neural Networks (CNN), Logistic Regression, Random forest, Feature extraction.

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