ABSTRACT

Flower are one part of plants that have diverse colors and shapes and are also beautiful. The classification of flowers in the world is very complex. There are many kinds of flowers within a region or country. In fact, there are flowers that are worldwide and there are almost all over the world. The classification of this flower is quite important because there are very similar flowers with different functions. In addition, there are also types of flowers that are poisonous and non-toxic. From this problem, it can be implemented into the MATLAB application which includes classifying flower types based on the shape and color of flower petals using the Principal Component Analysis (PCA) and K-Nearest Neighbor (KNN) algorithms. The work principle of the system as a whole is the introduction of several types of flowers based on the shape and color of the petals that serve as input with images of flower petals stored in the database using the K-Nearest Neighbor (KNN) algorithm or method.

Keywords— Classification, KNN, PCA, Types of Flowers