IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 7, April 2024

Medicinal Plant Identification using Machine Learning

Dr T. Vigneswari[1], K. Sibi[2], B. Sudhir[3], A. Vanthiyath Thevan[4], K. Yogeshwaran[5]
Assistant Professor, Department of Computer Science and Engineering[1]
Student, Department of Computer Science and Engineering[2,3,4,5]
Anjalai Ammal Mahalingam Engineering College, Thiruvarur, Tamil Nadu, India

Abstract: *Medicinal plants play a crucial role in traditional and modern medicine due to their properties. In this study, we propose the identification of medicinal plants using machine learning. The proposed system comprises several key components: data collection, feature extraction, model training, and prediction. Initially, a comprehensive dataset of medicinal plant images is gathered from databases. Next, relevant features such as leaf shape, texture, and colour are extracted from images using image processing techniques. Subsequently, ML algorithms such as Convolutional Neural Networks (CNNs) are employed to train a classification model on the extracted features. The trained model is then capable of accurately identifying medicinal plants from input images. To facilitate user interaction, a user-friendly interface may be developed, allowing users to upload images and receive instant identification results. Furthermore, the system's performance is evaluated in real-world scenarios to assess its practical utility and reliability. Overall, the proposed automated medicinal plant identification system represents a significant advancement in leveraging ML technology to streamline the identification process.*

Keywords: Machine learning, Convolutional Neural Networks

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