

Visvesvaraya Technological University, Belagavi – 590018



PROJECT PROPOSAL
ON
Project Title

Submitted in partial fulfillment of the requirements for the degree

BACHELOR OF ENGINEERING
in
COMPUTER SCIENCE & ENGINEERING

Submitted by

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Under the Guidance of

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DEPT. OF COMPUTER SCIENCE AND ENGINEERING
ST JOSEPH ENGINEERING COLLEGE
An Autonomous Institution

(Affiliated to VTU Belagavi, Recognized by AICTE, Accredited by NBA)

Vamanjoor, Mangaluru - 575028, Karnataka

2024-25

Project Title

The title must be written after drafting the whole project proposal; It has been written so that it is a true representative of the project plan. Example: An Application for Medicinal Plant Identification using Computer Vision

Type of Project

Research project / Product based project (Hardware) / Application project (Software) / Research & Application based project (Choose one which is most suitable to your project work)

Background for the the project

Should contain a brief background of the selected topic. It must identify the importance of study, It must clearly state the purpose of the study.

Example: In today's advanced world of medicine, exploring and understanding medicinal plants is like discovering a treasure chest where ancient wisdom meets modern health needs. For centuries, people have relied on specific plants to heal and improve well-being. Now, amidst complex medicines and growing environmental concerns, understanding these plants holds great importance. Diverse cultures have passed down knowledge about these plants through generations, a precious legacy. This traditional wisdom provides a natural approach to health, fostering a deep connection with nature. In response to the increasing demand for herbal medicines, we develop an application to automatically identify the plants based on its images.

Objectives

The aim/goal should be explained here.

Example: The aim of the proposed project work are:

1. To create a our own medicinal plant dataset
2. To develop a deep learning algorithm with high accuracy to identify the plant
3. To develop a web and mobile application to automatically identify the medicinal plant based on its image

Software / Hardware Requirements

List the Software/Hardware required for the development of the project.

Example: The software requirements are: Python IDE, Tensorflow, Keras, Android studio, Wamp web server.

Hardware requirements are: GPU to perform training.

References

- [1] Li, Siyuan, Lei Ke, Martin Danelljan, Luigi Piccinelli, Mattia Segu, Luc Van Gool, and Fisher Yu. "Matching Anything by Segmenting Anything." In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, pp. 18963-18973. 2024.
- [2] Coşkun, Musab, Ayşegül Uçar, Özal Yildirim, and Yakup Demir. "Face recognition based on convolutional neural network." In 2017 international conference on modern electrical and energy systems (MEES), pp. 376-379. IEEE, 2017.
- [3] Hu, Guosheng, Yongxin Yang, Dong Yi, Josef Kittler, William Christmas, Stan Z. Li, and Timothy Hospedales. "When face recognition meets with deep learning: an evaluation of convolutional neural networks for face recognition." In Proceedings of the IEEE international conference on computer vision Workshops, pp. 142-150. 2015.
- [4] Parkhi, Omkar, Andrea Vedaldi, and Andrew Zisserman. "Deep face recognition." In BMVC 2015-Proceedings of the British Machine Vision Conference 2015. British Machine Vision Association, 2015.
- [5] Levitin, Anany. "Introduction to design and analysis of algorithms", 2/E. Pearson Education India, 2008.