# AN IOMP

**on**

## **MobileNetV2 integration for high-performance image classification web app**

## Submitted to

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

## In partial fulfillment of the requirement for the award of the degree of

**BACHELOR OF TECHNOLOGY**

**In**

**COMPUTER SCIENCE AND ENGINEERING**

**By**

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**Under the Guidance of**

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**Department of Computer Science and Engineering**



August 2024



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Date: 28-JULY-2024

**CERTIFICATE**

This is to certify that the project work entitled “**MobileNetV2 integration for high-performance image classification web app”** work done by **PAMPARI SAI VAMSHI(217Y1A0547) and S SAI PRANAY (217Y1A0545)** students of Department of **Computer Science and Engineering,** is a record of Bonafide work carried out by the members during a period from June, 2024 to August, 2024 under the supervision of Mrs K Triveni Asst. Professor. This project is done as a fulfilment of obtaining Bachelor of Technology Degree to be awarded by Jawaharlal Nehru Technological University Hyderabad, Hyderabad.

The matter embodied in this project report has not been submitted by us to any other university for the award of any other degree.

|  |  |
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This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Date: Mrs K Triveni

Asst. Professor

The Viva-Voce Examination of above students, has been held on………………………

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Principal/Director

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# DECLARATION

We hereby declare that the project entitled “ **MobileNetV2 integration for high-performance image classification web app**” is the work done during the period from **June, 2024 to August, 2024** and is submitted in the partial fulfillment of the requirements for the award of degree of Bachelor of technology in computer Science and Engineering from Jawaharlal Nehru Technology University, Hyderabad. The results embodied in this project have not been submitted to any other university or Institution for the award of any degree or diploma.

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# ABSTRACT

This project is a web application that allows users to upload images and receive predictions about what is in those images using a machine learning model called MobileNetV2. Built with the Flask framework, the application provides a simple and user-friendly interface for image classification. When a user uploads an image, the application processes the image and uses the MobileNetV2 model, which has been trained on a large dataset called ImageNet, to identify objects within the image.

The model predicts the most likely category for the image and provides a confidence score, indicating how certain it is about the prediction. The application also handles file uploads and ensures that images are correctly processed before being analyzed.

The results are displayed back to the user, showing the predicted label and confidence level. This project demonstrates the integration of deep learning and web development, showcasing how advanced machine learning techniques can be made accessible to users through a web interface. It serves as an example of how technology can be used to enhance image recognition tasks in everyday applications.