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

Mrs K Triveni, Asst. Professor

Department of Computer Science and Engineering

MARRI LAXMAN REDDY

INSTITUTE OF TECHNOLOGY & MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

NAAC Accredited Institution with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

August 2024

MARRI LAXMAN REDDY
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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 ofBonafide 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 obtainingBachelor of Technology Degree to be awarded by Jawaharlal Nehru Technological UniversityHyderabad, 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.

P.SAI VAMSHI S. SAI PRANAY

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……

Head of the Department External Examiner

Principal/Director

ACKNOWLEDGEMENTS

We would like to express my sincere gratitude to my guide Mrs K Triveni, **Associate Professor**, Computer Science and Engineering, for her excellent guidance and invaluable support, which helped me accomplish the B. Tech degree and prepared me to achieve more life goals in the future. Her total support of my dissertation and countless contributions to my technical and professional development made for a truly enjoyable and fruitful experience. Special thanks are dedicated for the discussions we had on almost every working day during my project period and for reviewing my dissertation.

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On a more personal note, I thank my **beloved parents and friends** for their moral support during the course of our project.

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.