NEW HORIZON
COLLEGE OF ENGINEERING

Autonomous College, Affiliated to VTU | Approved by AICTE New Delhi & UGC
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A PROJECT REPORT (20CSE84A)

ON

"NEURAL EYES"

Submitted in partial fulfilment for the award of the degree of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

BY

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Under the guidance of

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NEW HORIZON COLLEGE OF ENGINEERING
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

It is hereby certified that the Project Phase-2 work entitled "**NEURAL EYES**" is a bonafide work carried out by **C.V. SAMPATH RAJU (1NH18CS048), DEEPAK.C (1NH16CS022)** in partial fulfilment for the award of **Bachelor of Engineering** in **COMPUTER SCIENCE AND ENGINEERING** of New Horizon College of Engineering during the year **2021-2022.** It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

27/06/22

Signature of Guide
(Ms. Revathi S)
Jeevitha R J

Signature of HOD
(Dr. B. Rajalakshmi)

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1. R. Sujanya	27/06/22
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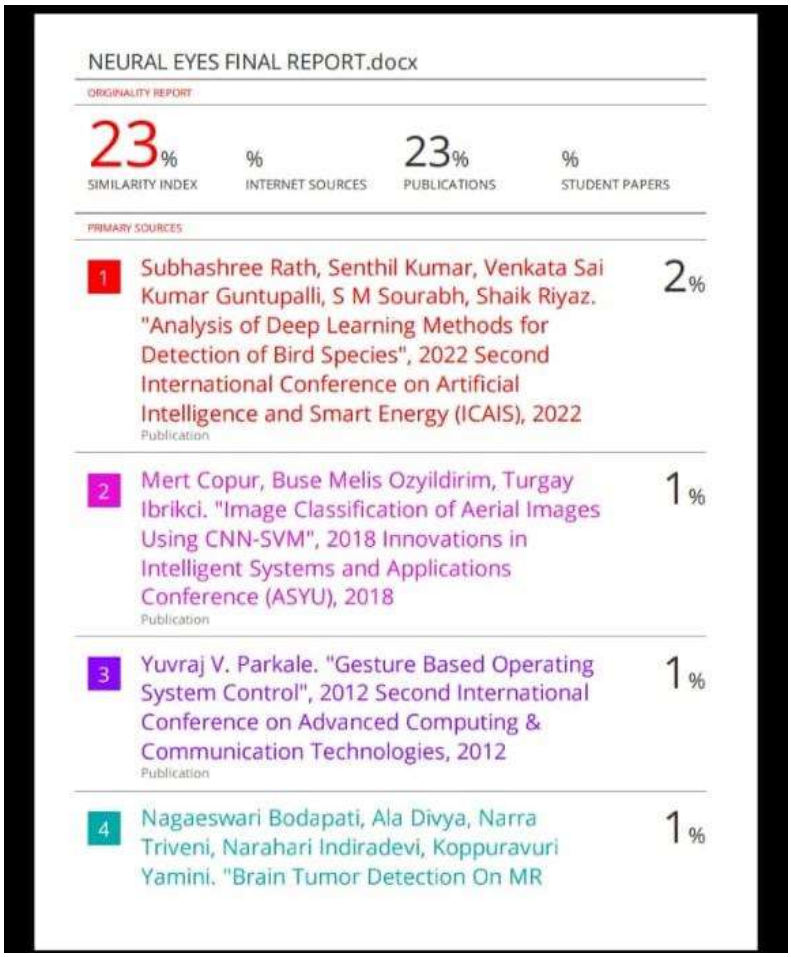

NEURAL EYES FINAL REPORT.docx

ORIGINALITY REPORT

23%	%	23%	%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Subhashree Rath, Senthil Kumar, Venkata Sai Kumar Guntupalli, S M Sourabh, Shaik Riyaz. "Analysis of Deep Learning Methods for Detection of Bird Species", 2022 Second International Conference on Artificial Intelligence and Smart Energy (ICAIS), 2022 Publication	2%
2	Mert Copur, Buse Melis Ozyildirim, Turgay Ibrikci. "Image Classification of Aerial Images Using CNN-SVM", 2018 Innovations in Intelligent Systems and Applications Conference (ASYU), 2018 Publication	1%
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4	Nagaeswari Bodapati, Ala Divya, Narra Triveni, Narahari Indiradevi, Koppuravuri Yamini. "Brain Tumor Detection On MR	1%

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SUBMISSION: 9513
TITLE: NEURAL EYES

---------- REVIEW 1 ----------
SUBMISSION: 9513
TITLE: NEURAL EYES
AUTHORS: Revathi S, C.V Sampath Raju and Deepak C

---------- Overall evaluation ----------
SCORE: 2 (accept)
----- TEXT:
We can accept the manuscript as it is. Since the author did a genuine work and compared with various methodologies and justified their works with datasets

---------- REVIEW 2 ----------
SUBMISSION: 9513
TITLE: NEURAL EYES
AUTHORS: Revathi S, C.V Sampath Raju and Deepak C

---------- Overall evaluation ----------
SCORE: 2 (accept)
----- TEXT:
The paper is well written, the authors are suggested to incorporate the following minor revision,

1. The methodology is not clear. The authors are suggested to provide a brief description about the methodology.
2. The literature survey is weak, please enhance the literature section with more recent and relevant articles.
3. Fig. 6 needs proper explanation.
4. All the equations should be written in math type or equation editor. Equation in image form are not at all acceptable.

ABSTRACT

Visually impaired people require assistance as they face great challenges because it is difficult for them to navigate themselves in the real-world terrain as there would be many obstacles in each step. The proposed paper represents the work using deep learning models that assists the visually impaired in real time. The method that we proposed using convolutional neural network (CNN) and Support vector machine (SVM). Through CNN we achieve 90% object detection and SVM is good in decision boundary that segregates n-dimensional space into classes to correctly categorize the data this best decision boundary is called hyperplane so we used CNN to correctly classify the objects and with help of SVM categorize these classified objects. The CNN algorithm is trained using a set of images to identify the objects and SVM algorithm is also trained with these set of images so it can learn the different features of each object so it increases the efficiency in classifying the objects.

Keywords: CNN, SVM, VISUALLY IMPAIRED

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