

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**  
"Jnana Sangama", Belagavi-560014, Karnataka



PROJECT REPORT ON

**"SKIN DISEASE PREDUCTION USING MACHINE LEARNING"**

*SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
PROJECT*

**BACHELOR OF ENGINEERING  
IN  
INFORMATION SCIENCE & ENGINEERING**

Submitted By

**BINDUSHREE T N [1SV19IS003]  
MUSKAN.W [1SV19IS010]  
SAHANA Y GOWDA [1SV19IS014]  
SINDHUSHREE K O [1SV19IS001]**

Under the guidance of

**Mr. Girish L**

Assistant Professor, Dept. of CSE.  
SIET, Tumakuru.



*Manish Kumar*  
PRINCIPAL  
SHRIDEVI INSTITUTE OF  
ENGINEERING AND TECHNOLOGY  
TUMAKURU - 572106

Department of Information Science and Engineering

**SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated To Visvesvaraya Technological University)

Sira Road, Tumakuru – 572106, Karnataka.

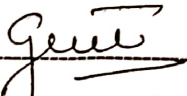
2022-2023



DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

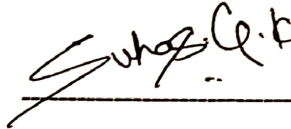
CERTIFICATE

This is to certify that, the project entitled "SKIN DISEASE PREDUCTION USING MACHINE LEARNING" has been successfully carried out by BINDUSHREE T N [1SV19IS003], MUSKAN W [1SV19IS010], SAHANA Y GOWDA [1SV19IS003], SINDHUSHREE K O [1SV19IS019], in partial fulfillment for the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University, Belagavi** during the academic year **2022-23**. It is certified that all the corrections/suggestions indicated for internal assessments have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.



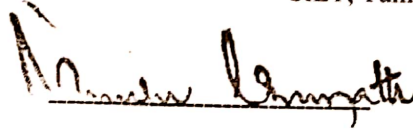
Signature of Guide

**Mr. Girish L** B.E., M.Tech.,  
Assistant Professor,  
Dept. of ISE,  
SIET, Tumakuru.



Signature of H.O.D

**Dr. Suhas G K** B.E., M.Tec, Ph.D  
Associate Professor & HOD  
Dept. of ISE,  
SIET, Tumakuru.



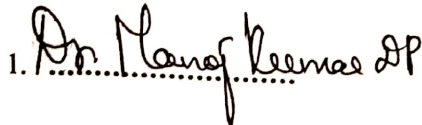
Signature of Principal

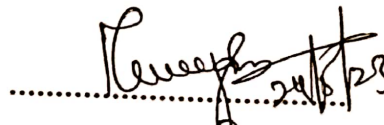
**Dr. Narendra Viswanath** M.E., Ph.D., MIE, MISTE, MIWS., FIV.,  
Principal,  
SIET, Tumakuru

External Viva

Name of the Examiners


Signature with Date

1. 

 24/5/23

2. 

 24/5/23

  
PRINCIPAL  
SHRIDEVI INSTITUTE OF  
ENGINEERING AND TECHNOLOGY  
TUMAKURU - 572 106



SHRIDEVI  
EDUCATION

Sri Shridevi Charitable Trust (R.)  
**SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Sira Road, Tumkur - 572 106, Karnataka, India.

Phone: 0816 - 2212629 | Principal: 0816 - 2212627, 9686114899 | Telefax: 0816 - 2212628

Email: info@shrideviengineering.org, principal@shrideviengineering.org | Website: www.shrideviengineering.org

(Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi)

ESTD: 2002



DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

DECLARATION

We, BINDUSHREE T N [1SV19IS003], MUSKAN W [1SV19IS010], SAHANA Y GOWDA [1SV19IS014], SINDHUSHREE K O [1SV19IS019] student of VIII semester B.E in Information Science & Engineering, at Shridevi Institute of Engineering & Technology, Tumakuru, hereby declare that, the Project work entitled "SKIN DISEASE PREDUCTION USING MACHINE LEARNING", embodies the report of our Project work carried out under the guidance of Mr. Girish L, Assistant Professor, Department of CSE, SIET, Tumakuru as partial fulfillment of requirements for the Project report in Bachelor of Engineering in Information Science & Engineering of Visvesvaraya Technological University, Belagavi, during the academic year 2022-23. The Project has been approved as it satisfies the academic requirements in respect to the Project work.

Place: Tumakuru

Student Name & Signature

Date: 24/05/23

BINDUSHREE T N [1SV19IS003] *Bindushree*  
MUSKAN W [1SV19IS010] *Muskan*  
SAHANA Y GOWDA [1SV19IS014] *Sahana Gowda*  
SINDHUSHREE K O [1SV19IS019] *Sindhushree*

*Muskan Gowda*

PRINCIPAL  
SHRIDEVI INSTITUTE OF  
ENGINEERING AND TECHNOLOGY  
TUMKUR - 572106



## ACKNOWLEDGEMENT

This Project will be incomplete without thanking the personalities responsible for this venture, which otherwise would not have become a reality.

We express our profound gratitude to **Dr. Narendra Viswanath**, Principal, S.I.E.T. for his moral support towards completing our Internship-Project work.

We would like to thank Head of Department **Dr. Suhas G K** Head, Department of ISE, SIET for providing all the support and facility.

We would like to thank my guide **Mr. Girish L**, Assistant Professor, Department of computer Science and Engineering, SIET for his help, sharing his technical expertise and timely advice.

We would like to express our sincere gratitude to all teaching and non-teaching faculty of the department of ISE for guiding us of this project by giving valuable suggestion and encouragement.

For

**BY:**

**BINDUSHREE T N [1SV19IS003]**

**MUSKAN W [1SV19IS010]**

**SAHANA Y GOWDA [1SV19IS014]**

**SINDHUSHREE K O [1SV19IS019]**

*Narendra Viswanath*  
PRINCIPAL  
SHRIDEVI INSTITUTE OF  
ENGINEERING AND TECHNOLOGY  
TUMKUR - 572106





# ShriTEK Innovations

● Skill & Career Development Centre, Room No. 3, Ground Floor,  
SIET Campus, Sira Road, Tumakuru - 572 106. Karnataka.

☎ : 0816-2211642

🌐 : www.shritek.com

✉ : shritekinnovations@gmail.com


Date: 23/05/2023

## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. **BINDUSHREE T N** bearing USN **1SV19IS003** Student of **Shridevi Institute of Engineering and Technology** has successfully completed her Project Work titled "Skin Disease Prediction Using Machine Learning".

We wish every success in her career.

For ShriTEK Innovations

  
Authorized Signature





PRINCIPAL  
SHRIDEVI INSTITUTE OF  
ENGINEERING AND TECHNOLOGY  
TUMKUR - 572106



Date: 23/05/2023

TO WHOM SO EVER IT MAY CONCERN

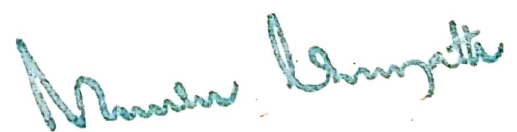
This is to certify that **Ms. MUSKAN W** bearing USN **1SV19IS010** Student of **Shridevi Institute of Engineering and Technology** has successfully completed her Project Work titled **“Skin Disease Prediction Using Machine Learning”**.

We wish every success in her career.

For ShriTEK Innovations

  
Authorized Signature





SHRIDEVI INSTITUTE OF  
ENGINEERING AND TECHNOLOGY  
TUMKUR - 572106

# ShriTEK Innovations

Skill & Career Development Centre, Room No. 3, Ground Floor,  
SIET Campus, Sira Road, Tumakuru - 572 106. Karnataka.

☎ : 0816-2211642

🌐 : www.shritek.com

✉ : shritekinnovations@gmail.com

Date: 23/05/2023

## TO WHOM SO EVER IT MAY CONCERN

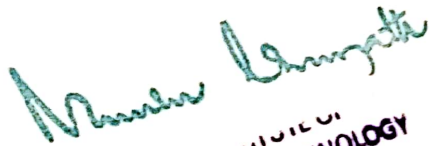
This is to certify that Ms. SAHANA Y GOWDA bearing USN 1SV19IS014 Student of Shridevi Institute of Engineering and Technology has successfully completed her Project Work titled "Skin Disease Prediction Using Machine Learning".

We wish every success in her career.

For ShriTEK Innovations

  
Authorized Signature





SHRIDEVI INSTITUTE OF  
ENGINEERING AND TECHNOLOGY  
TUMKUR - 572106.



Date: 23/05/2023

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Ms. SINDHUSHREE K O** bearing USN **1SV19IS019** Student of **Shridevi Institute of Engineering and Technology** has successfully completed her Project Work titled **“Skin Disease Prediction Using Machine Learning”**.

We wish every success in her career.

For ShriTEK Innovations



Authorized Signature



SHRIDEVI INSTITUTE OF  
ENGINEERING AND TECHNOLOGY  
TUMKUR - 572106.



---

## ABSTRACT

Skin diseases pose a significant challenge to public health, and accurate and timely diagnosis is crucial for effective treatment. Traditional diagnosis methods rely heavily on visual inspection by dermatologists, which can be subjective and time-consuming. In recent years, deep learning techniques have emerged as promising tools for automated skin disease prediction, offering the potential for efficient and reliable diagnosis. This abstract presents a study on the application of deep learning algorithms for skin disease prediction. The dataset used for training and evaluation consists of a large collection of high-resolution images representing various skin conditions, encompassing common diseases such as acne, eczema, psoriasis, and melanoma.

The methodology involves preprocessing the image dataset to enhance the quality and standardize the input format. Transfer learning is employed to leverage pre-trained models and adapt them to the specific task of skin disease classification. The model's architecture is fine-tuned to optimize performance, considering factors such as the number of layers, filter sizes, and pooling strategies. To assess the effectiveness of the proposed approach, rigorous evaluations are conducted, including metrics such as accuracy, precision, recall, and F1 score. A comparison is made between the deep learning-based prediction system and traditional diagnosis methods to highlight the potential benefits and limitations of the automated approach.

Preliminary results demonstrate promising performance, with the deep learning model achieving high accuracy and effectively differentiating between various skin diseases. The system shows potential for assisting dermatologists in early detection, allowing for timely interventions and improved patient outcomes. This research contributes to the field of dermatology by exploring the application of deep learning techniques in skin disease prediction. The study's findings provide insights into the feasibility and potential benefits of automated diagnosis systems, emphasizing the importance of further research to refine and validate the proposed approach. Ultimately, the development of accurate and efficient skin disease prediction models could significantly improve healthcare outcomes, facilitating early intervention and enhancing the quality of patient care.

*Manish Kumar*