

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

"Jnana Sangama", Belagavi-560014, Karnataka



**CGV MINI PROJECT REPORT**

**ON**

***"wind mill simulation"***

***SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
CGV LAB***

**BACHELOR OF ENGINEERING  
IN  
COMPUTER SCIENCE & ENGINEERING**

**Submitted By**

**HARSHITHA T A  
(1SV20CS014)**

**Under the guidance of**

**Mr. Renukaradhya P.C B.E., M.Tech.,**

**Assistant Professor, Dept. of CSE.**

  
**PRINCIPAL  
SIET, TUMKUR.**



**Department of Computer Science and Engineering**

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

**Sira Road, Tumakuru – 572106, Karnataka.**

**2022-23**



Sri Shridevi Charitable Trust (R.)

# SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

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

Sira Road, Tumakuru - 572 106. Karnataka.

Phone: 0816-2212629 | Fax: 0816-2212628 | Email: info@shrideviengineering.org | Web: http://www.shrideviengineering.org



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### CERTIFICATE

This is to certify that, Computer Graphics and Visualization Mini-Project of entitled "Wind mill simulation" has been successfully carried out by HARSHITHA T A [1SV20CS014], in partial fulfillment for the CGV Lab of Bachelor of Engineering in Computer 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 Mini- Project report has been approved as it certifies the academic requirements in respect of Mini-Project work prescribed for the Bachelor of Engineering Degree.

#### Signature of Guide

**Mr. Renukaradhya P.C B.E., M.Tech.,**

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

PRINCIPAL  
SIET. TUMKUR.

#### Signature of H.O.D

**Dr. Basavesha D M.Tech.,Phd,**

Associate Professor &  
HOD Dept. of CSE.  
SIET, Tumakuru.

#### Name of the Examiners

1 ..... G. I. R. I. S. H. - L .....

2 ..... Harish M .....

#### Signature with date

..... 12/12/23 .....

.....



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### DECLARATION

I, HARSHITHA T A [1SV20CS014], student of VI semester B.E in Computer Science & Engineering, at Shridevi Institute of Engineering & Technology, Tumakuru, hereby declare that, the Mini-Project work entitled "WIND MILL SIMULATION", embodies the report of our Mini-Project work carried out under the guidance of Mr. Renukaradhya P.C, Assistant Professor, Department of CSE, SIET, Tumakuru as partial fulfillment of requirements for the CGV Lab in Bachelor of Engineering in Computer Science & Engineering of Visvesvaraya Technological University, Belagavi, during the academic year 2022-23. The Mini-Project has been approved as it satisfies the academic requirements in respect to the Mini-Project work.

Place: Tumakuru

Date: 04/07/23

*Harshitha T.A*

Student Name & Signature

HARSHITHA T A  
[1SV20CS014]

*N. Renukaradhya P.C*  
PRINCIPAL  
SIET, TUMKUR.

## **ABSTRACT:**

The objective of this paper is to determine optimal solutions for the implementation of renewable energy in Romania, using for this purpose the available Geographic Information Systems technology. We also want to demonstrate that the GIS technology can be used as a substitute for programs dedicated to wind energy.

High energy consumption problem has become increasingly acute human needs. Domestic heating in winter involves considerable expenses, so the idea of energy conservation and the need to implement reliable and innovative solutions in the field of energy in constructions emerged. Given these constraints, a judicious approach of the built environment is the study of energy consumption starting from the concept phase. This paper presents a parametric study regarding impact on energy consumption for different factors and the weighing associated. The analysis has been performed using an energy simulation program, which is able to provide a complex analysis of the thermal behavior of the building for different cases. The thermal behavior of a building should be the result of a multi-criteria optimization, considering both thermal comfort and energy

### **Technology used**

**Graphics Software:** various software packages are available for creating computer graphics, including 3D modeling and animation software,

### **Computer Hardware:**

A powerful computer with a good graphics card and sufficient storage capacity is required to run graphics software, C++ and python languages are used in graphics.

*Marius Lemjette*

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