**Lakshmi Shravika Siddhabattula**

**PROFILE**

Logical and organized individual with a good

foundation in Electrical and Computer engineering. Proficient in C and Python. A capable leader, and team builder with articulate and professional communication skills.

**EDUCATION**

* **B.Tech** **Electrical and Computer Engineering**

**CGPA – 7.66 / 10 2019-2023**

Amrita Vishwa Vidyapeetham

* **Class 12** – 96.9% **2019**

Institution:

* **Class 10** – 100% **2017**

**TECHNICAL INTERESTS**

Robotics, OOPs, Database Management

**PROJECTS**

**Loan Approval Prediction Model**   
By using machine learning applications we predicted whether the loan can be approved or not.

**Movie Ticket Booking System**   
By using Object oriented programmimg and data structures we built an online movie ticket booking system.

**Accident Alert in Mist**   
By using IR sensor we have detected the mist on the roads and alerted the vehicle driver.

**Blood Bank Management System**   
By using Database systems, we developed a system for central blood bank management that provides real-time information about blood components, grouping, and donor information from collection to testing and use of blood products.

**Custom Rate Limiter Implementation for Power**   
**Management in Electric Vehicles with Supercapacitor Systems**   
 Created a C-coded rate limiter within a MATLAB Function Block to refine power management strategies in Electric Vehicles (EVs) employing supercapacitor energy storage.

This innovative module adeptly regulates energy flow between the supercapacitor bank and the vehicle's power system, heightening energy efficiency and system   
stability

**Project Euler**   
Successfully tackled the initial nine challenges on Project Euler, demonstrating strong mathematical and   
programming abilities. These problems encompassed a diverse range of topics, showcasing my capacity to   
develop creative algorithms and apply them effectively to complex computational challenges.

**Inverse Matrix Calculator: Python Program for**   
**Efficient Matrix Inversion**   
 Designed a Python program that calculates matrix inverses using determinant, cofactor, and adjugate techniques. Skillfully handling user input and producing results in a well-organized table, this project showcases a robust command of athematical operations and algorithmic implementation

**Number Guessing App: Interactive Python Game**   
A Python-based interactive game allowing users to guess the computer's chosen number or challenge the computer to guess theirs, showcasing strong programming skills and interactive application design.

**Morse Code Converter: Python Text-to-Morse and Morse-to-Text**   
 Created a Python application for converting text to Morse code and vice versa using an efficient dictionary-based approach, showcasing adeptness in data mapping, encoding, and decoding methods

**Hangman Challenge: Dynamic Word-Guessing Game in Python**   
 Python-based Hangman Game offering interactive word- guessing, random word selection, real-time feedback, and captivating visuals, highlighting expertise in creating engaging text-based gaming experiences

**Internet Speed Tester**   
Created a Python-based Internet Speed Tester utilizing the 'speedtest' library to measure download and upload speeds. The program automates server selection, conducts speed tests, and displays real-time results. Skills used include proficiency in utilizing external libraries, network testing, and data visualization

**TECHNICAL SKILLS**

VsCode   
Jupyter   
PostgreSQL   
WireShark   
Webots   
MatLab   
LtSpice

Pycharm

Python

OOPs

C

SQL

**LANGUAGES**

English, Hindi, Telugu