**SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN:: BHIMAVARAM**

**(AUTONOMOUS)**

**DEPARTMENT OF CSE**

**Academic Year:: 2021-22 :: II Semester**

**B.Tech - PROJECT WORK:: ABSTRACT**

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| **Name of the Class / Section** | IV B.Tech CSE - B | | |
| **Batch Number** | B8 | | |
| **Project Domain / Technology** | Machine Learning | | |
| **Project Title** | Traffic Sign Detection | | |
| **Guide Name** | Mrs. K. Ratna Kumari | | |
| **Students Registered** | **Registered Number** | **Student Name** | **Student**  **Signature** |
| 18B01A0573 | Kompella Venkata Subbalakshmi | K. V. Subbalakshmi |
| 18B01A0579 | Neralla Pavani | N. Pavani |
| 18B01A0591 | Kasinadhuni Hiranmayee | K. Hiranmayee |
| 18B01A05A3 | Mosalikanti Sita Varshini | M. S. Varshini |
|  | 19B05A0507 | Ganta Mohana Sailaja | G. M. Sailaja |

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| **Signature of**  **Internal Project Guide** | **Signature of**  **B.Tech Project – Coordinator** | **Signature of**  **Head of the Department** |

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| **Abstract of the Project ( In 200 words)** | | | |
| Traffic signs are an integral part of our road infrastructure. They provide critical information, sometimes compelling recommendations for road users, which in turn requires them to adjust their driving behaviors to make sure they adhere to whatever road regulation currently enforced.  They keep traffic going by aiding travelers in reaching their destinations and providing them with advance notice of arrival, exit. There are several different types of traffic signs like speed limits, no entry, traffic signals, etc.  Vehicles are all set to drive along the road. As roads get denser with other vehicles, it is difficult for vehicles to identify all the traffic signs on the path. Chances of missing out on crucial signs that may lead to fatal accidents cannot be neglected. According to statistics, Driver behavior or error is identified as a major factor in 94 percent of crashes, and self-driving vehicles can help reduce driver errors.  To vehicles to overcome this problem we thought of implementing a machine learning model which can detect traffic signs. | | | |
| **Existing System (If any) – Features & Drawbacks** | | | |
| * Output is displayed in text format which sometimes cannot be observed by the driver.   **Proposed System – Features**  **List of objectives/features that are planned to implement.** | | | |
| * Converts that text into speech format and makes the system able to reads it out. | | | |
| **(i)Functional Requirements**  **(ii) Non Functional Requirements**  **(iii) Software & Hardware Requirements** | | | |
| **(i)Functional Requirements :**  These are the requirements that the end-user specifically demands as basic facilities that the system should offer. All these functionalities need to be necessarily incorporated into the system as a part of the contract. These are represented or stated in the form of input to be given to the system, the operation performed and the output expected.  **(ii) Non Functional Requirements :**  These are basically the quality constraints that the system must satisfy according to the project contract. The priority or extent to which these factors are implemented varies from one project to another.  **(iii) Software & Hardware Requirements :**  Anaconda Spyder Notebook  Operating System : Windows 10  RAM : 4GB  Processor : Intel Core i3 or above  Hard Disk : 120GB | | | |
|  | Expected Date of completion  11 – 04 – 2022 |
| Literature Survey | Literature survey papers list  <https://www.researchgate.net/publication/224255280_Real-time_traffic_sign_recognition_system>  <https://www.ijert.org/traffic-sign-recognition-using-machine-learning-a-review?amp=1> |
| **Modules** | **Expected date of completion** |
| Preprocessing | 21 – 02 – 2022 |
| Feature Extraction | 20 – 03 – 2022 |
| Segmentation | 20 – 03 – 2022 |
| Results and Analysis | 10 – 04 – 2022 |
| Testing the project | 11 – 04 – 2022 |
| Project Report | 19 – 04 – 2022 |