**** **DEPARTMENT OF INFORMATION TECHNOLOGY**

**III IT Mini Project**

**A.Y. 2022-2023**

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| **Domain / Areas** | Deep Learning | |
| **Title of the Project** | **Leaf Disease Detection Using Deep Learning Techniques** | |
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| **ABSTRACT**: Agriculture is the mainstay of the Indian economy. Immense commercialisation of an agriculture has creates a very negative effect on our environment. In agricultural field,the disease in plants is more common and the detection of disease in plants has become more feasible.  Plant leaf diseases and destructive insects are a major challenge in the agriculture sector. Faster and an accurate prediction of leaf diseases in crops could help to develop an early treatment technique while considerably reducing economic losses. Modern advanced developments in Deep Learning have allowed researchers to extremely improve the performance and accuracy. In this paper, we proposed a deep-learning-based approach to detect leaf diseases in many different plants using images of plant leaves. Our goal is to find and develop the more suitable deep-learning methodologies for our task. The proposed system can effectively identified different types of diseases with the ability to deal with complex scenarios from a plant’s area. | | |
| **Software/Hardware Needs** | | **Hardware:** 1) Processor -I5/Intel processor  2) RAM - 8GB (min)  3) Hard Disk – 128 GB  **Software:** 1) Python 3.6  2) Operating system : Windows 10  3)Libraries : Numpy, keras,  pandas, tensorflow |

**Signature of the Guide**