COTTON CROP MONITORING SYSTEM USING CNN

ABSTRACT:

Agriculture is main occupations of India. Cotton known as "White gold". It is one of the most important fiber and cash crop of India and plays a dominant role in the industrial and agricultural economy of the country. It provides the basic raw material (cotton fiber) to cotton textile industry. Cotton crop is highly prone to pests and diseases. Employing people in cotton disease classification task in quiet laborious and time consuming. Here, an automatic cotton disease classification, cotton stages and weed in cotton is essential. Using the idea of convolution neural network (CNN) is implementing to give the solution of above problems and to develop an embedded system using ZYNQ ZCU104 FPGA. Common diseases in cottons are cercospora leaf spot, fusarium wilt, verticilium wilt, curl disease, bacteria blight, cotton boll disease etc.

OBJECTIVE:

- **To develop a system with low cost.**
- **To detect the symptoms of diseases as early as they appear on the growing plant.**
- **To develop compact and portable one.**
- **Using Google colaboratory platform to increase the dataset count and to get better accuracy.**