Abstract

Himachal Pradesh (India), having 85% of its population in rural areas produces 1 million tonnes of fruits yearly approximately, out of which 85-88% are Apples. But due to catastrophic nature of climate in the region, people across the state suffer severe damage to their crops causing huge financial loss every year. Anti Hail Guns firstly in India, were installed in Shimla district in particular apple growing areas, to prevent the damage to apples from Hailing. This Paper presents a credible Data Mining approach to discover the patterns and predict the formation of hails in clouds, so that guns can be fired accurately well in time reducing damage to fruit from hail and minimizing miss gun shots. Paper also presents the survey
of work done in literature related to weather forecasting using data mining techniques. Support Vector Machine (SVM) a Data Mining algorithm have been implemented using different kernel functions upon 5 years weather data collected from the IMD (Indian Meteorological Department) Shimla to predict hailing. Performance and prediction accuracy of SVM with respect to all kernel functions and different size of training data have been analyzed to check the Sensitivity of the model.

References


**Index Terms**

Computer Science

Pattern Recognition

**Keywords**

Svm, Ann, Hail, Anti Hail Gun, Prediction.