OSPCA- An anomaly detection technique for large scale data

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Anomaly detection is becoming a popular research subject in the field of data mining. Anomaly, which is treated as an outlier in the data set can lead to various abnormal activities, intrusions, spam, bank frauds. We design a system based on osPCA to detect outliers from large scale data. Algorithm becomes more effective as there is no need to store the complete covariance matrix. An online updating technique is used for the detection of anomaly. Outliers of target instance can be determined by analyzing the principal component of the data. This can be done by over- sampling the target instance of data. osPCA implements least square approximation to find the best possible solution by reducing error. As compared with the popular PCA and other anomaly detection methods, osPCA is more effective in terms of time and memory computation.

Biography

Purvaja Ingawale is studying in Rajarshi Shahu College of Engineering from Pune University. She is pursuing BE in Computer Engineering. She is mainly interested in data mining and is doing her project in that field. She is interested to work in data mining field in future.

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