ML22/23-12: Implement Anomaly Detection Sample

Information Technology Course

Module Software Engineering

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**Abstract -- HTM (Hierarchical Temporal Memory) is a machine learning algorithm, biologically inspired, both structurally and functionally, by neocortex of a human brain, which uses a hierarchical network of nodes to process time-series data in a distributed way.**

1. **Introduction: There are several examples in industries including finance, IT, security, medicine, and energy where anomalies provide important information in urgent circumstances. A large portion of the world's data is streaming, time-series data. However, identifying irregularities in streaming data is challenging, necessitating real-time data processing rather than batch processing, learning, and prediction-making by detectors. A machine learning method, the Hierarchical Temporal Memory (HTM) algorithm is based on the core concepts of the Thousand Brains Theory. Its layout and are fashioned after the neocortex, a large, complex area of the human brain.**
2. **Methods:**
3. **Result:**
4. **Discussions:**
5. **References**