Anomaly Detection-2

Assignment Questions

PW SKILLS

Q1. What is the role of feature selection in anomaly detection?

Q2. What are some common evaluation metrics for anomaly detection algorithms and how are they computed?

Q3. What is DBSCAN and how does it work for clustering?

Q4. How does the epsilon parameter affect the performance of DBSCAN in detecting anomalies?

Q5. What are the differences between the core, border, and noise points in DBSCAN, and how do they relate to anomaly detection?

Q6. How does DBSCAN detect anomalies and what are the key parameters involved in the process?

Q7. What is the make_circles package in scikit-learn used for?

Q8. What are local outliers and global outliers, and how do they differ from each other?

Q9. How can local outliers be detected using the Local Outlier Factor (LOF) algorithm?

Q10. How can global outliers be detected using the Isolation Forest algorithm?

Q11. What are some real-world applications where local outlier detection is more appropriate than global outlier detection, and vice versa?

Note: *Create your assignment in Jupyter notebook and upload it to GitHub & share that github repository link through your dashboard. Make sure the repository is public.*