DICE
ANALYTICS

Data Science and Machine Learning

https://www.facebook.com/diceanalytics/

https://pk.linkedin.com/company/diceanalytics

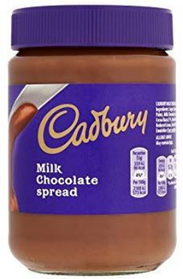
Machine Learning

What is Computer?

To automate a <u>Task</u> at large <u>Scale</u>

DICE ANALYTICS

What is Machine Learning?



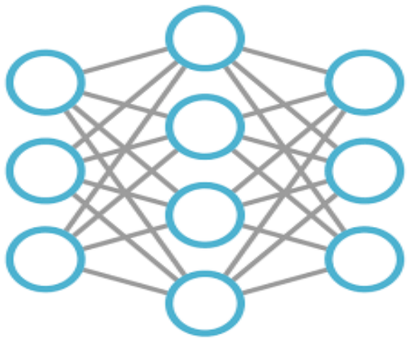
To automate a <u>Decision Making Task</u> at large <u>Scale</u>

DICE ANALYTICS

Machine Learning Process

Experience → **DATA**

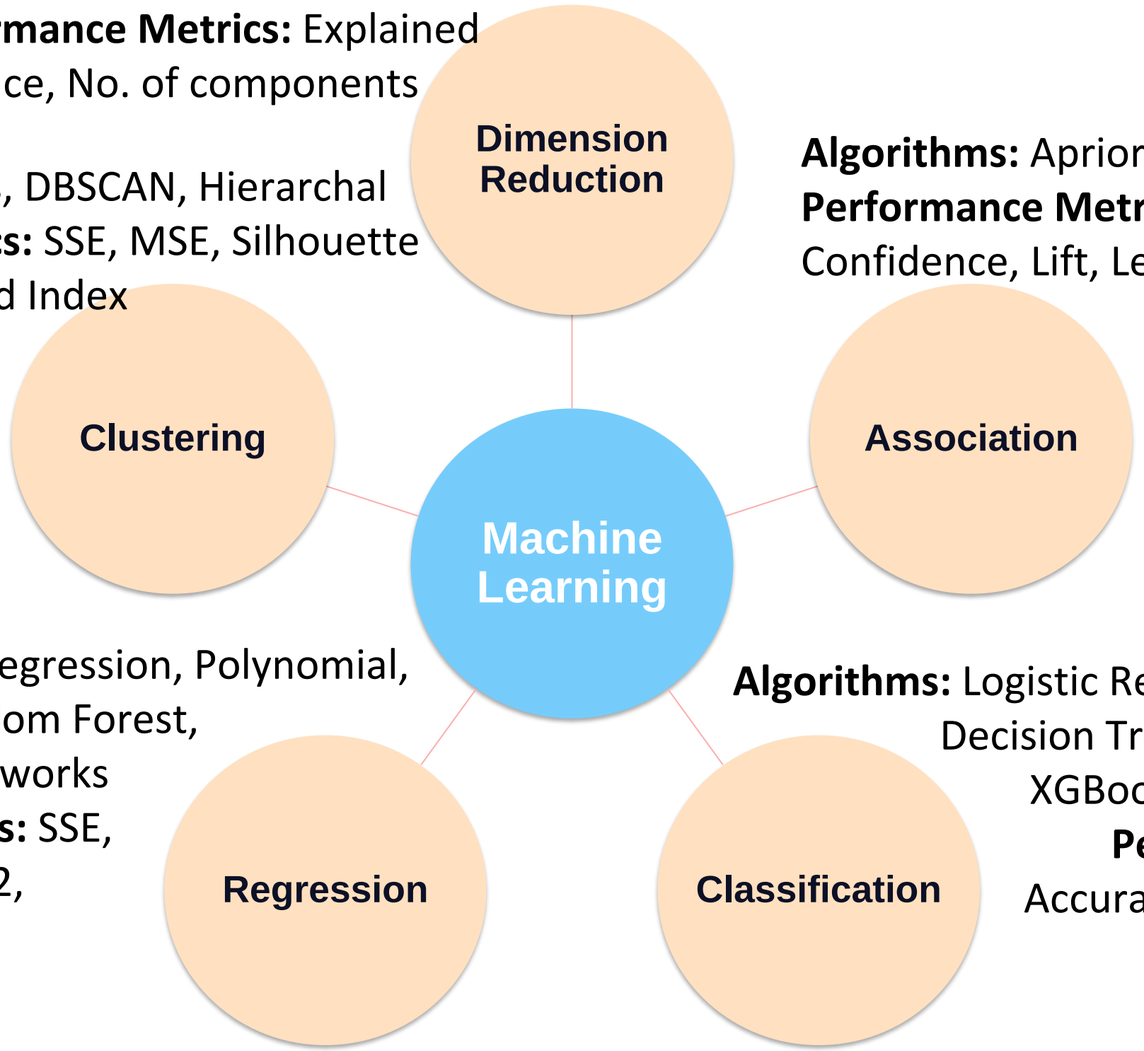
Task → **ALGORITHM**



Performance Metrics → **TESTING**

DICE ANALYTICS

Machine Learning Tasks



Algorithms: PCA, t-SNE
Performance Metrics: Explained Variance, No. of components

Algorithms: KMeans, DBSCAN, Hierarchal
Performance Metrics: SSE, MSE, Silhouette Score, Adjusted Rand Index

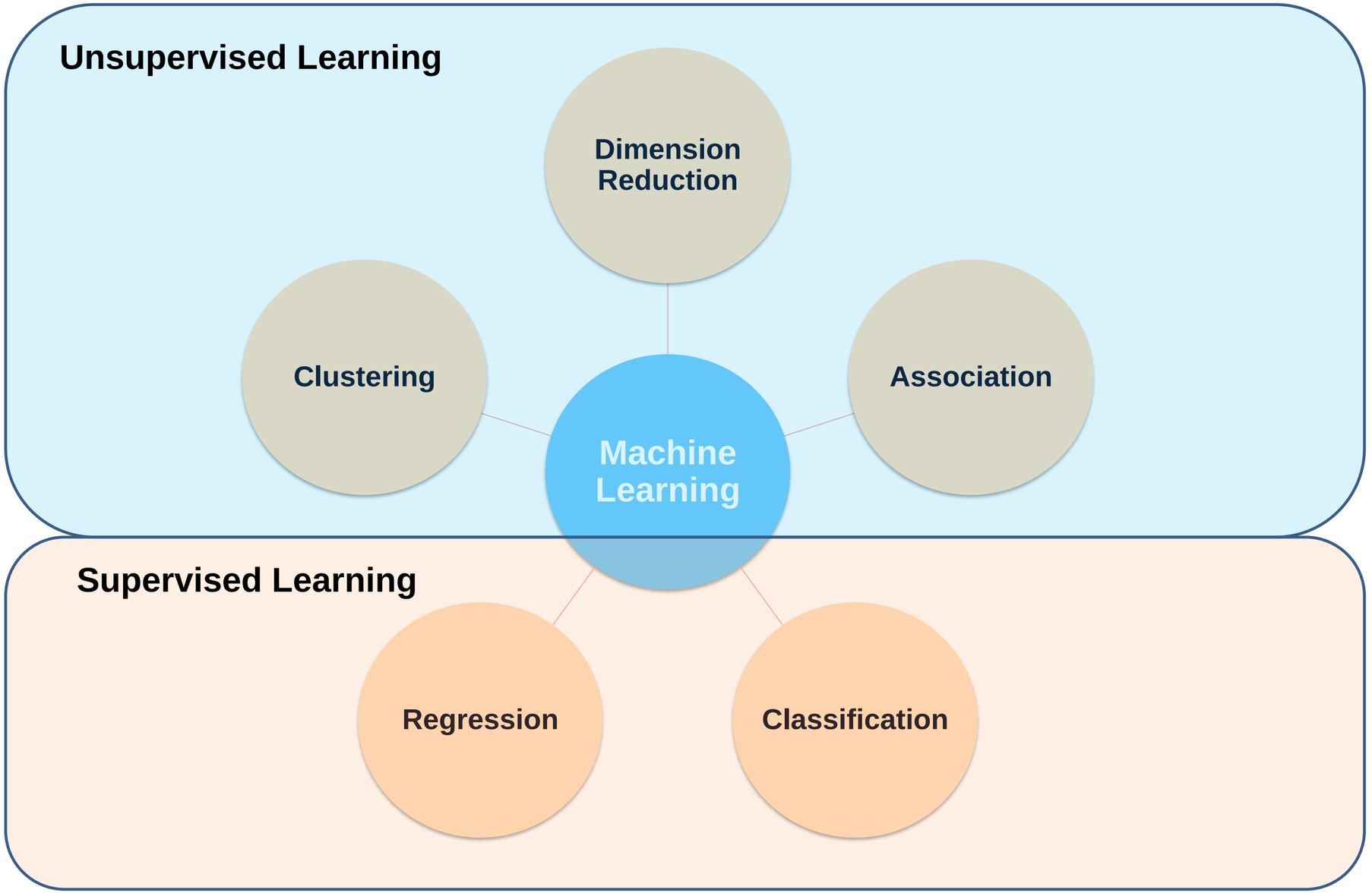
Algorithms: Apriori, FP Growth
Performance Metrics: Support, Confidence, Lift, Leverage, Conviction

Algorithms: Linear Regression, Polynomial, Decision Trees, Random Forest, XGBoost, Neural Networks
Performance Metrics: SSE, MSE, R2, Adjusted R2, Residual

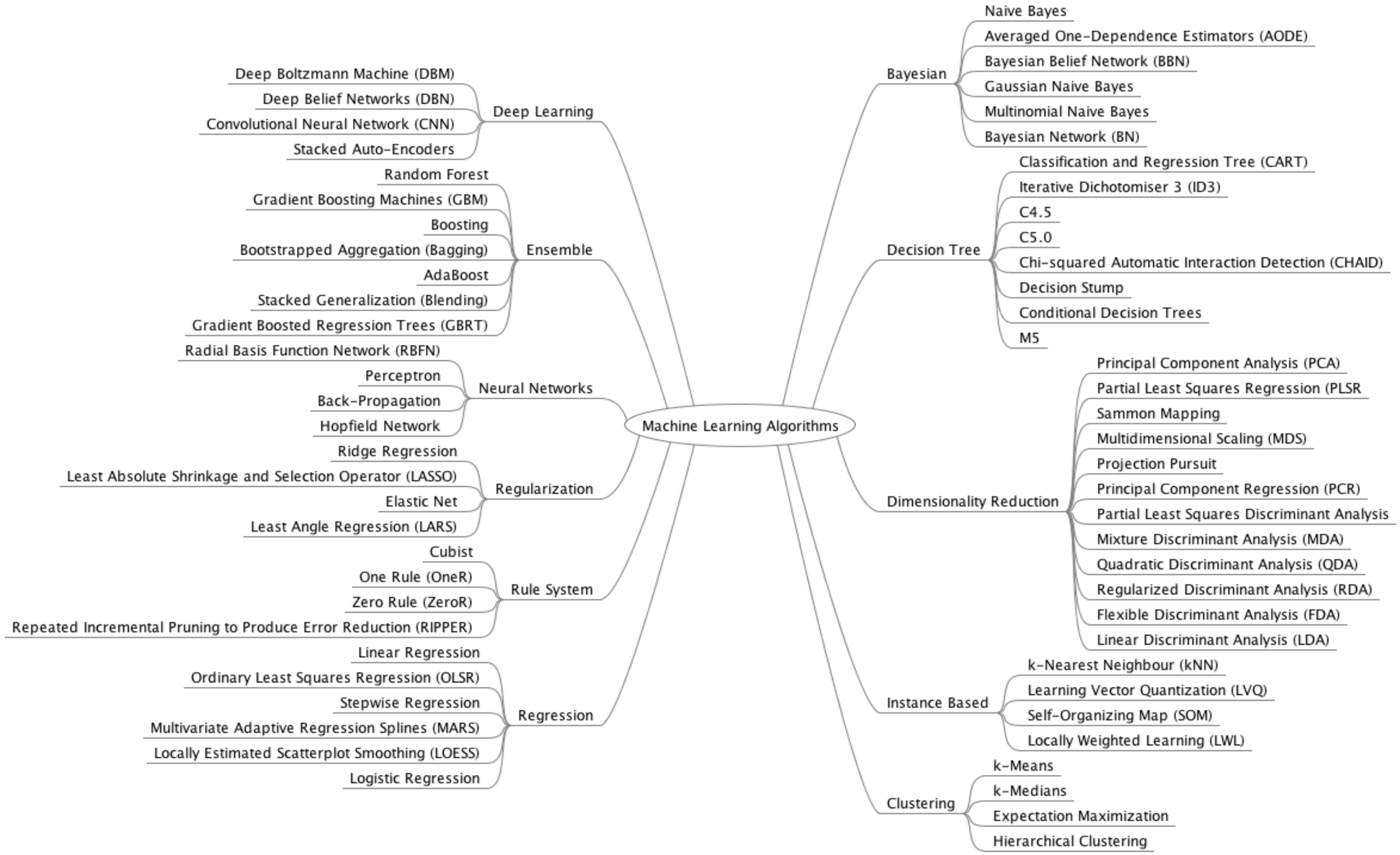
Algorithms: Logistic Regression, KNN, SVM Decision Trees, Random Forest, XGBoost, Neural Networks
Performance Metrics: Accuracy, Recall, Precision, F1 score, AUC

DICE ANALYTICS

Machine Learning Tasks



Machine Learning Algorithms



DICE ANALYTICS