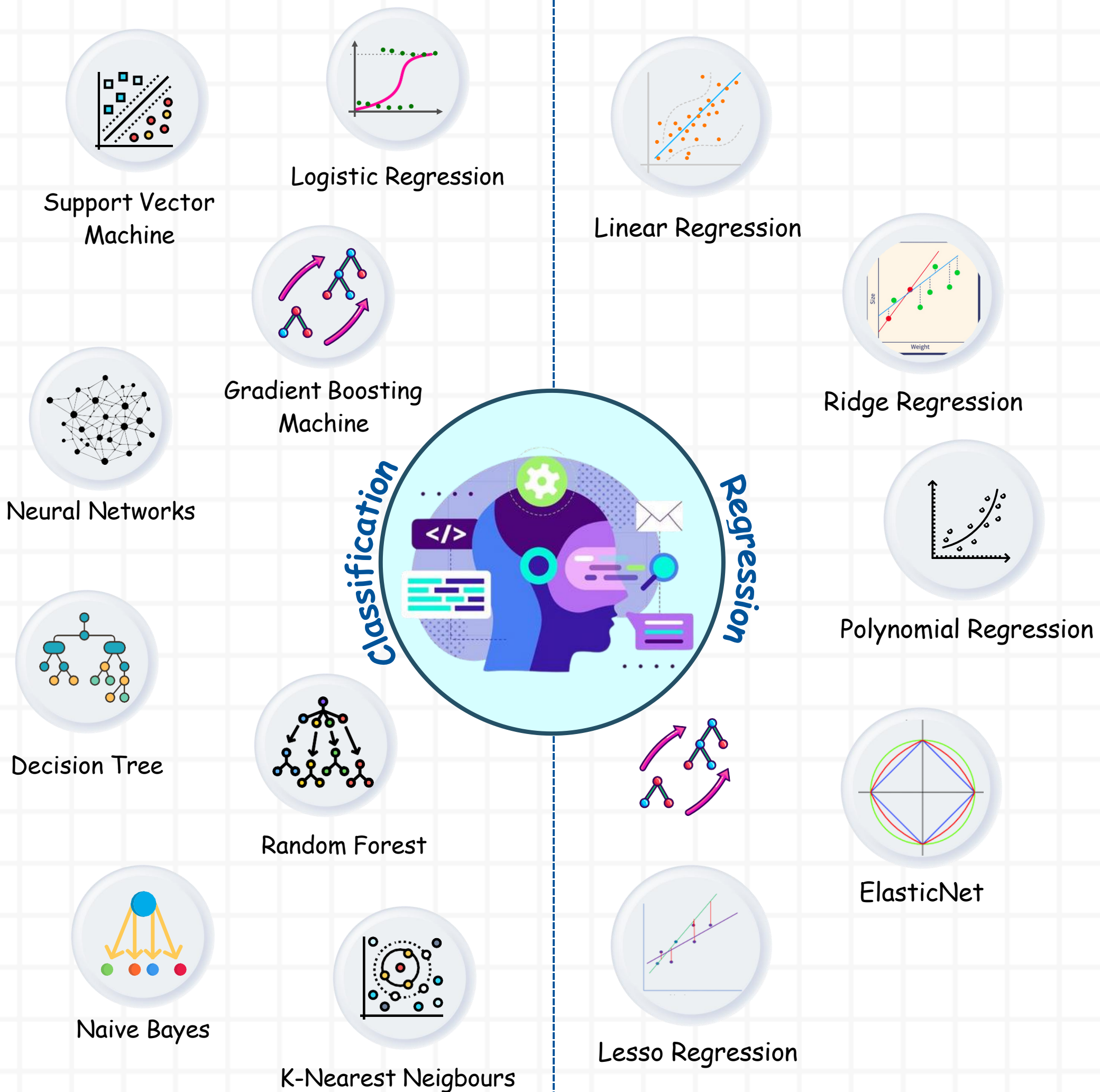
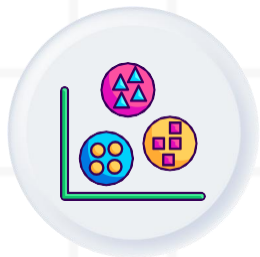


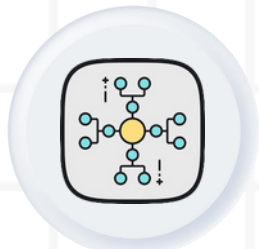
Supervised Learning



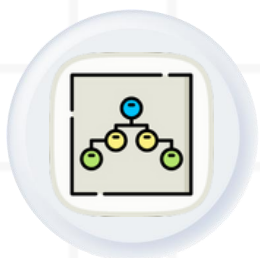
Unsupervised Learning



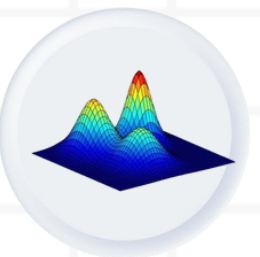
K-Means Clustering



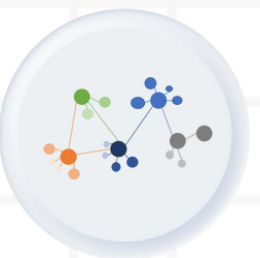
DBSCAN



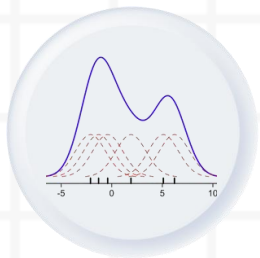
Hierarchical Clustering



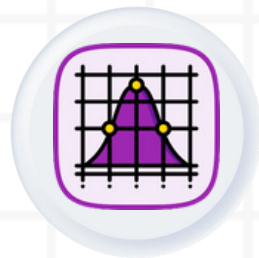
Gaussian Mixture Models



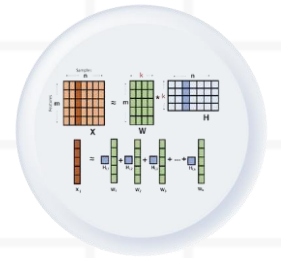
Mean Shift Clustering



Kernel Density Estimation



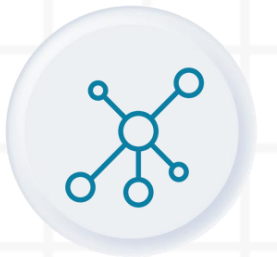
Gaussian Mixture Models



Non-Negative Matrix Factorization (NMF)



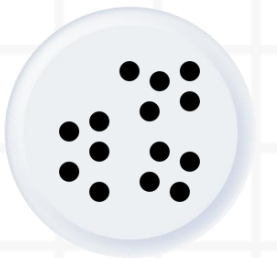
Independent Component Analysis



Factor Analysis



UMAP



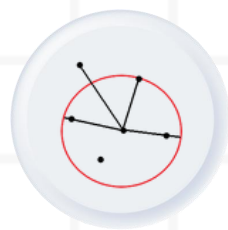
t-SNE



Principal Component Analysis



Elliptic Envelope



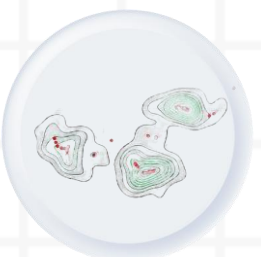
Local Outlier Factor



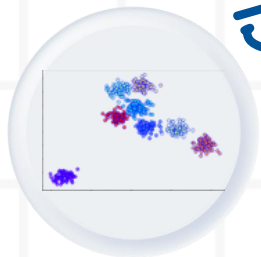
Isolation Forest



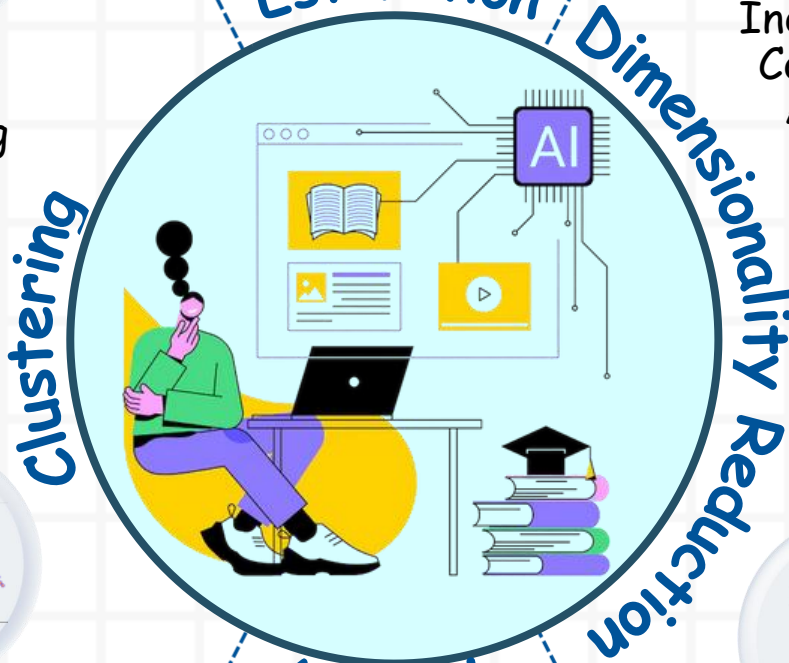
One-Class SVM



Spectral Clustering



Birch



Clustering

Density Estimation

Dimensionality Reduction

Anomaly Detection



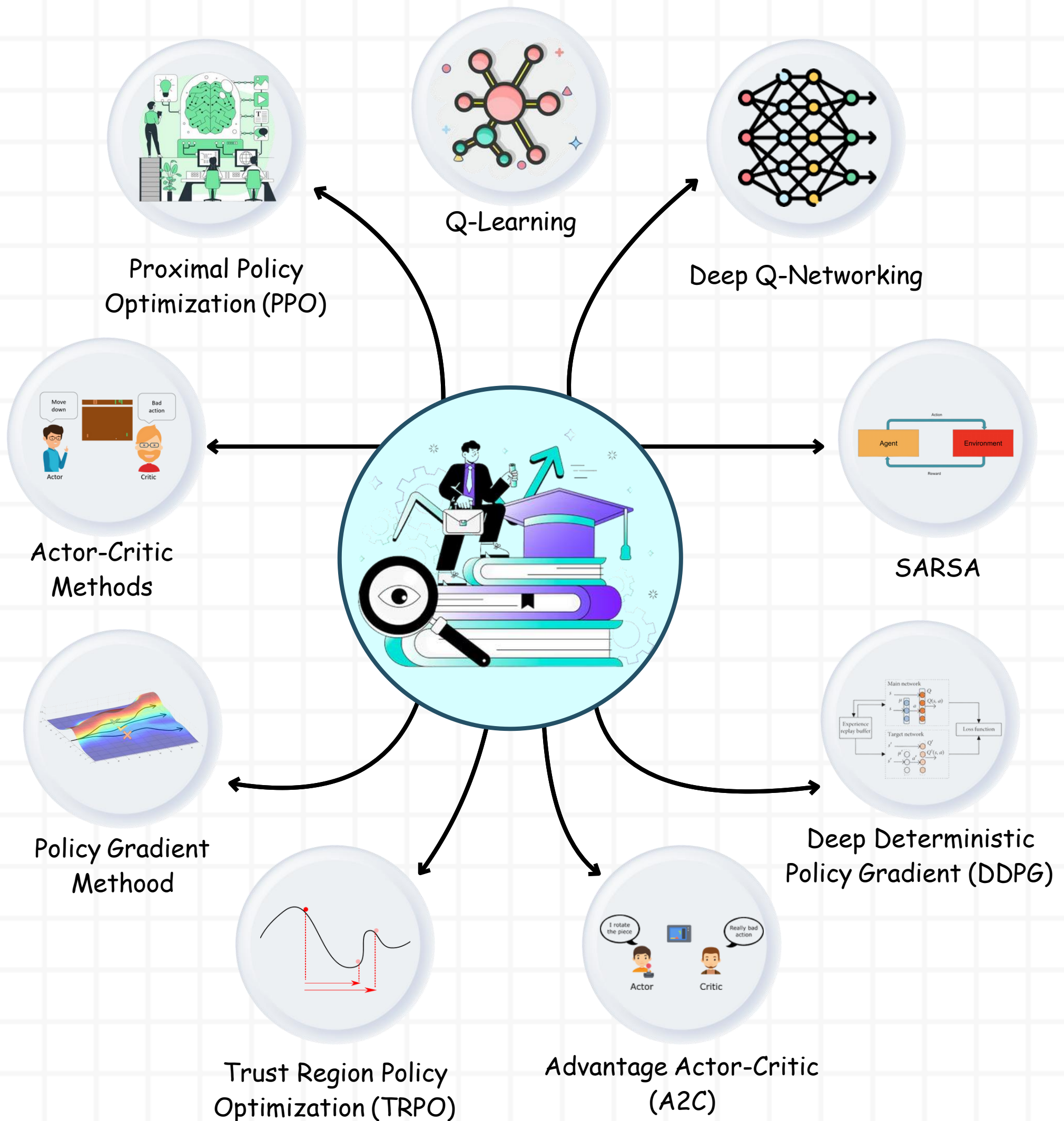
Semi-Supervised Learning



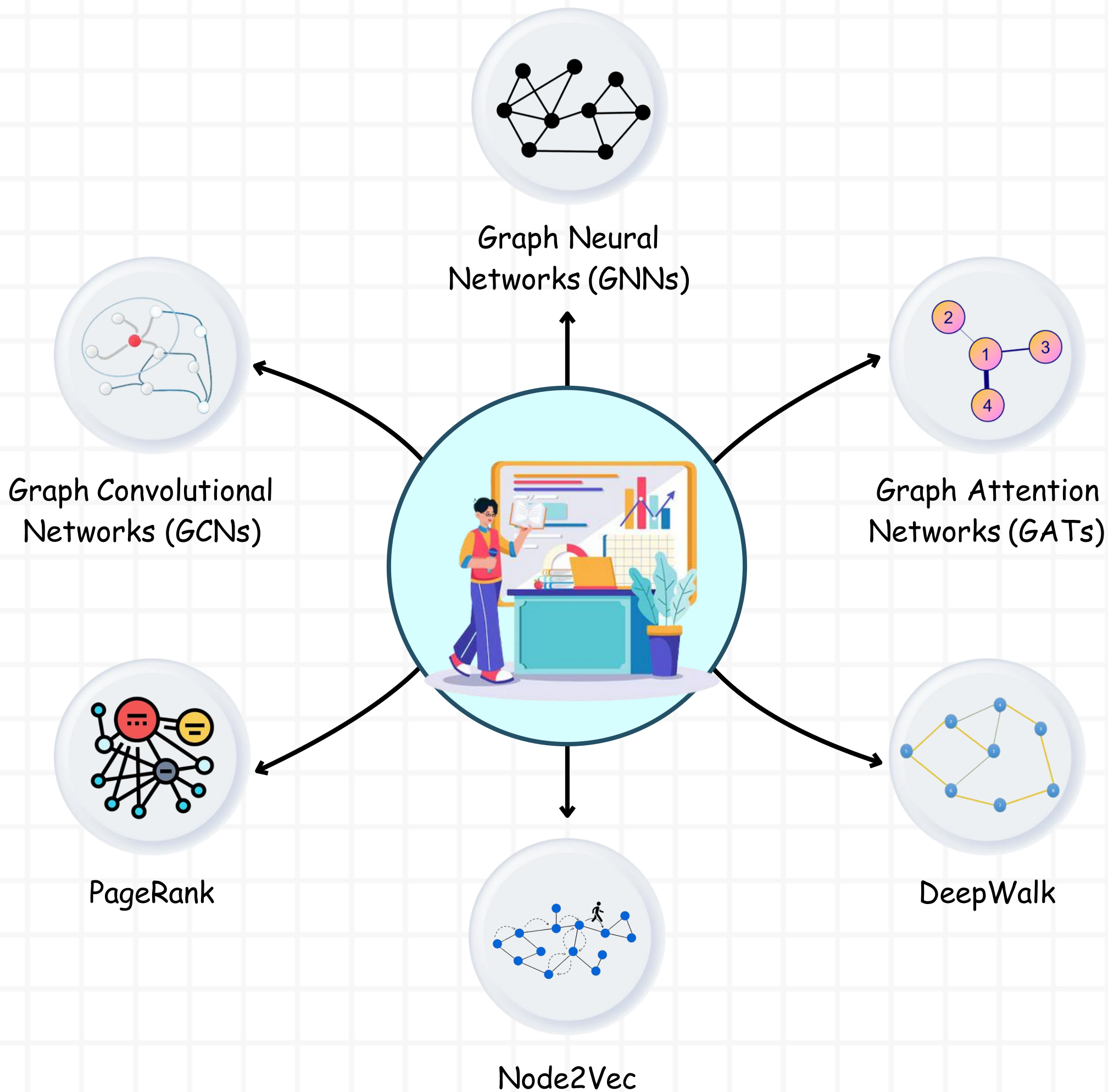
Ensemble Learning



Reinforced Learning



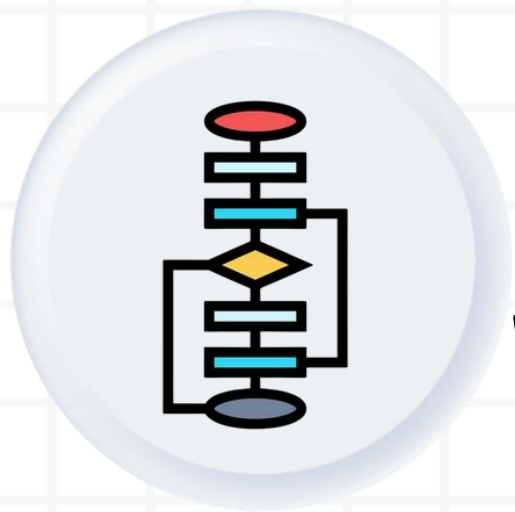
Graph-Based Learning



Time series analysis



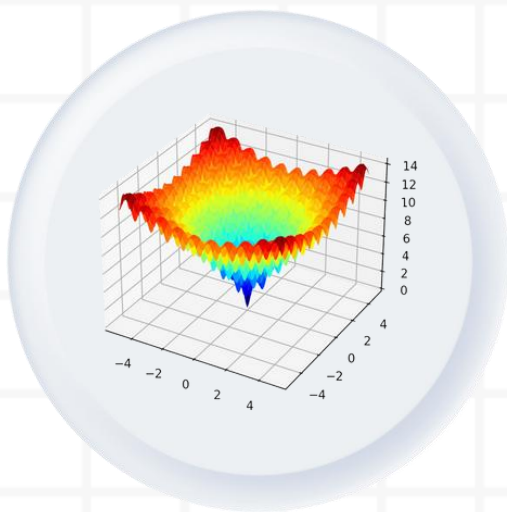
Evolutionary algorithms



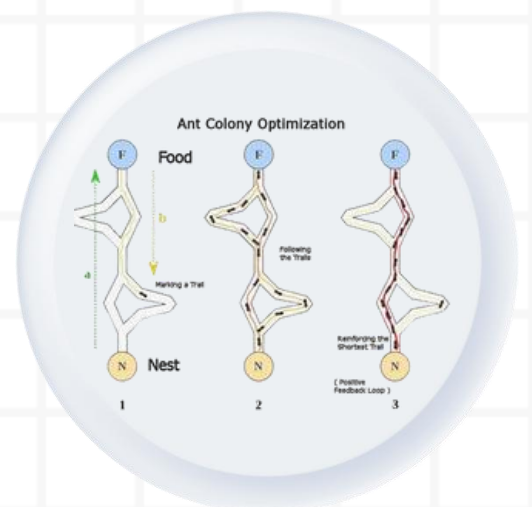
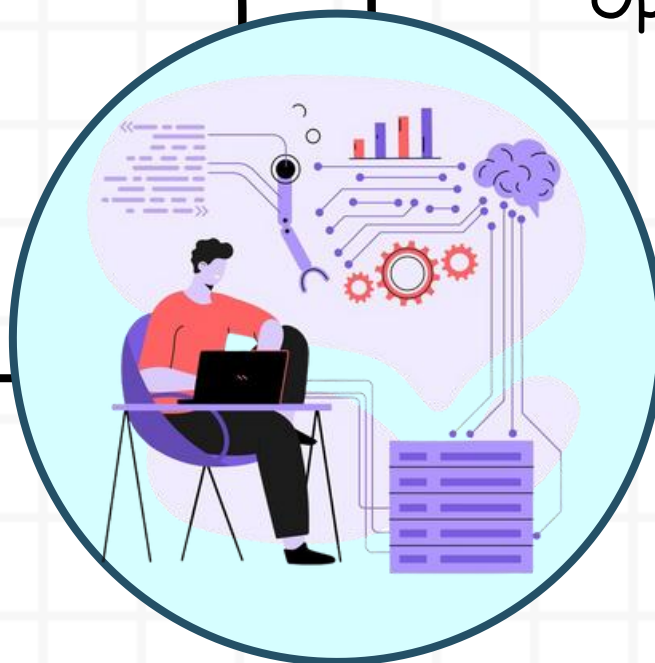
Genetic Algorithms



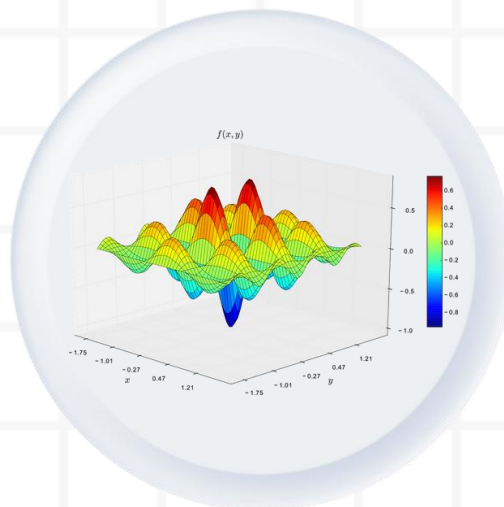
Particle Swarm Optimization



Differential Evolution

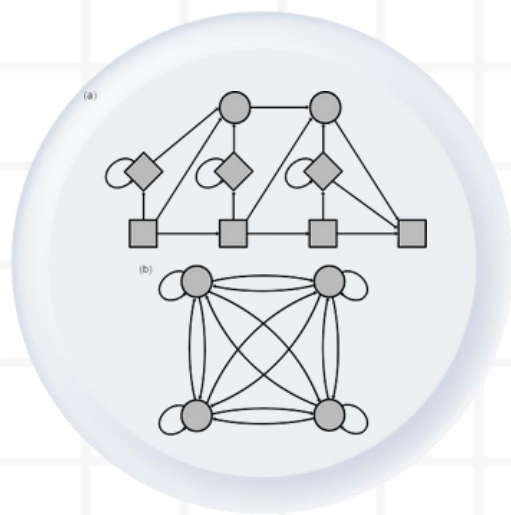


Ant Colony Optimization

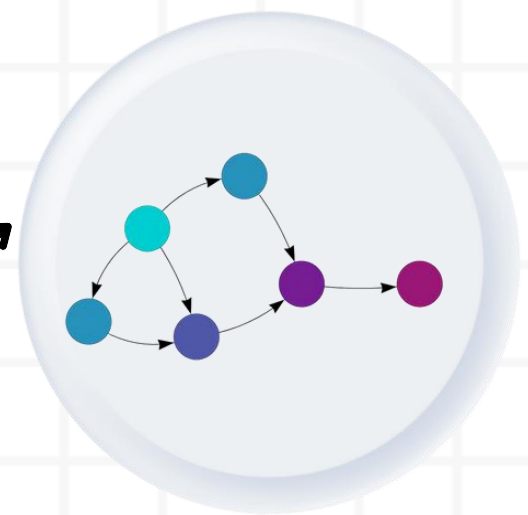


Simulated Annealing

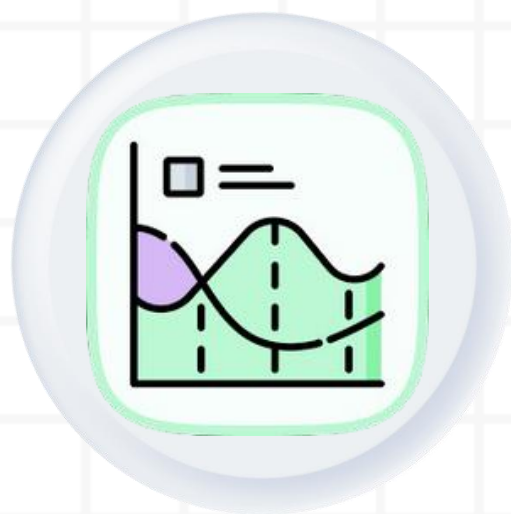
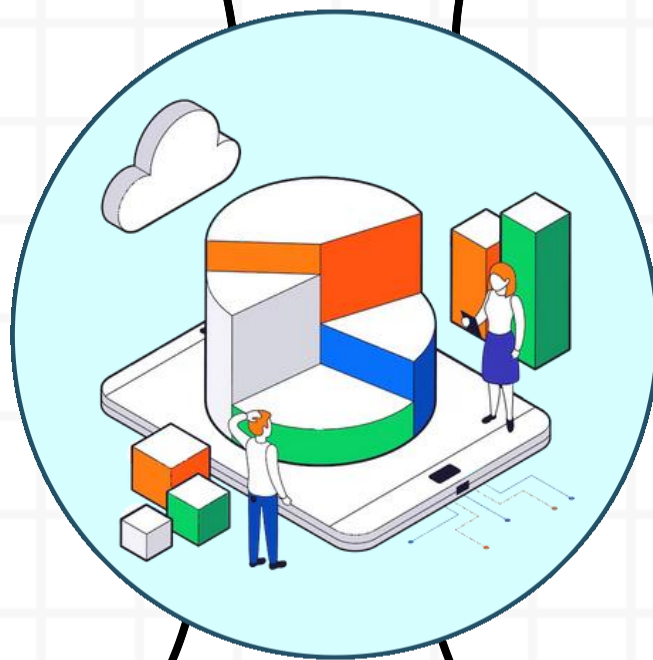
Probabilistic Models



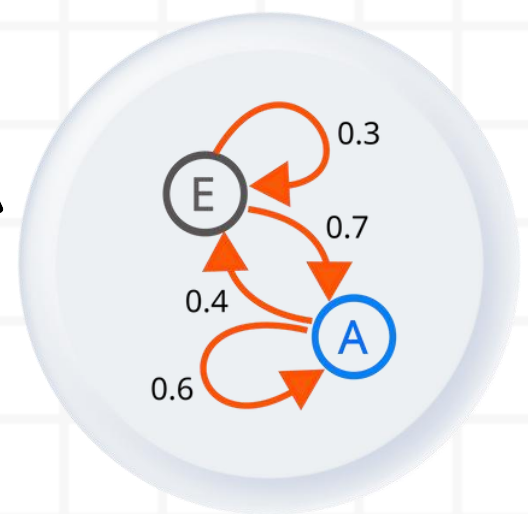
Hidden Markov Models (HMMs)



Bayesian Networks

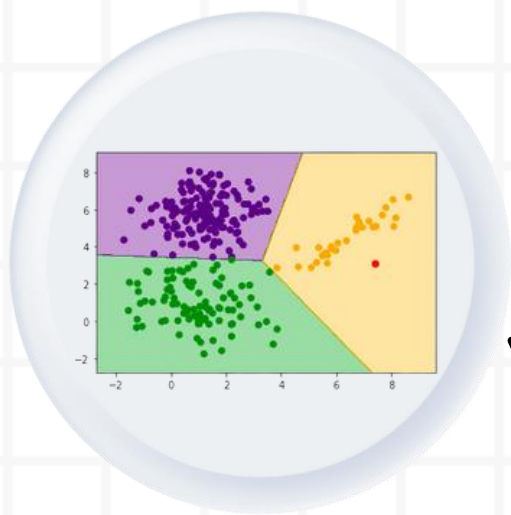


Gaussian Processes

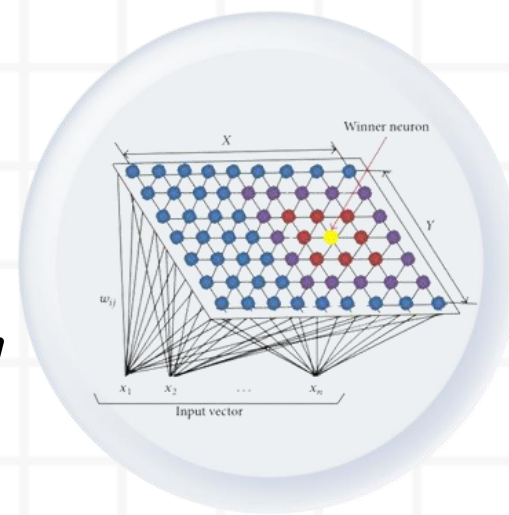


Markov Chains

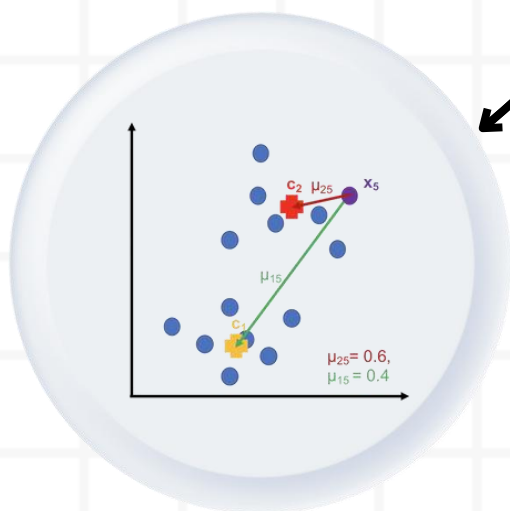
Specialized Algorithms



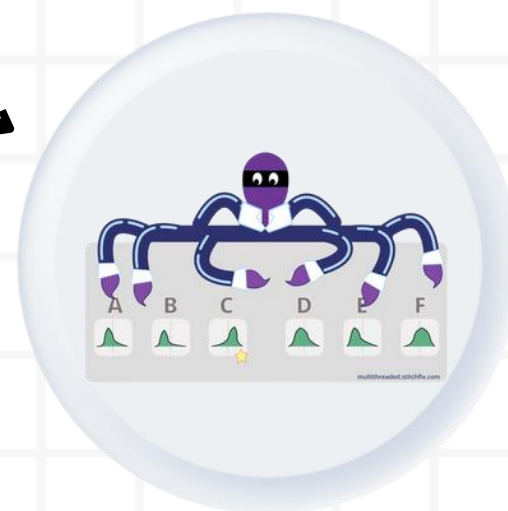
Expectation-
Maximization (EM)



Self-Organizing
Maps (SOMs)

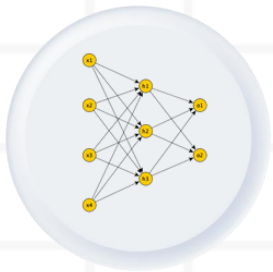


Fuzzy C-Means
Clustering

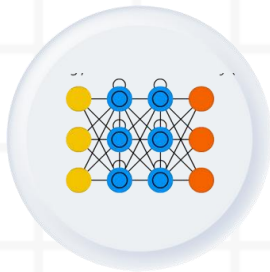


Multi-Armed
Bandit

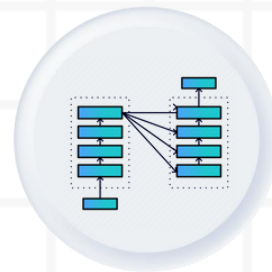
Deep Learning



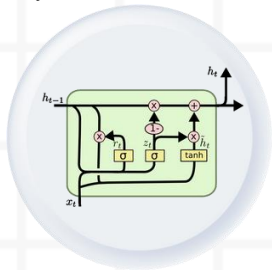
Feedforward Neural Networks (FNN)



Long Short-Term Memory Networks (LSTMs)



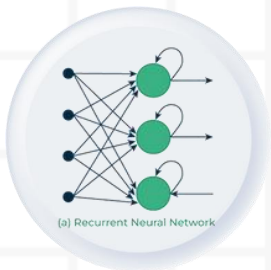
Transformers



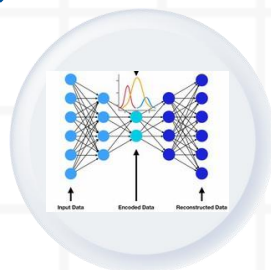
Gated Recurrent Units (GRUs)



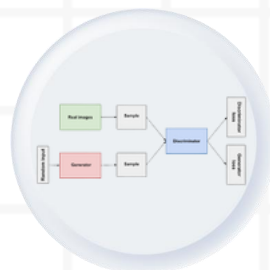
Convolutional Neural Networks (CNNs)



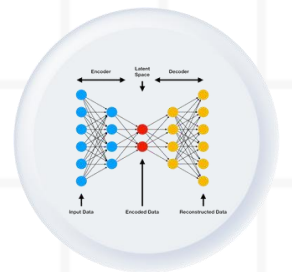
Recurrent Neural Networks (RNNs)



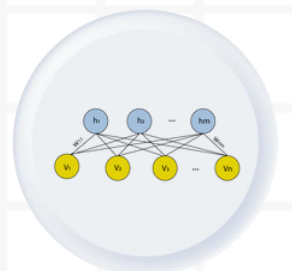
Variational Autoencoders (VAEs)



Generative Adversarial Networks (GANs)



Autoencoders



Restricted Boltzmann Machines (RBMs)

