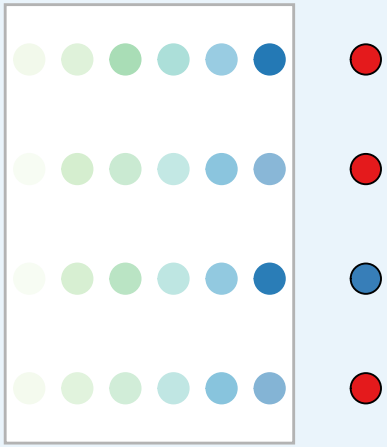
Supervised Learning

Input Data (Features) | Label



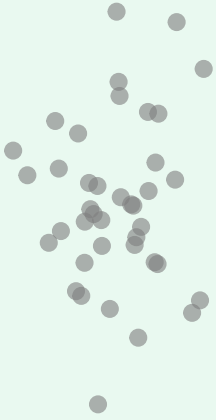
ML Model
(Random Forest)

Predicted Labels

Goal: Predict labels for new data
Example: Classify tumors

Unsupervised Learning

Input Data (Unlabeled)

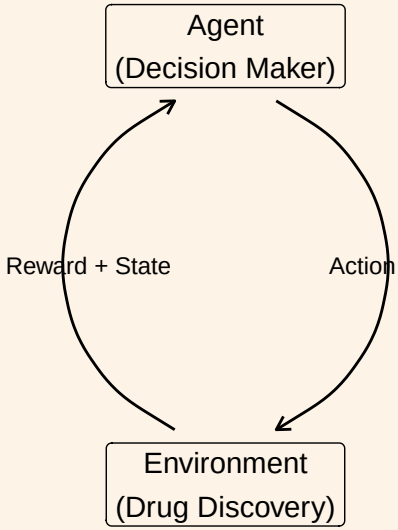


ML Model
(PCA / K−Means)

Output Clusters

Goal: Find hidden structure
Example: Identify cell types

Reinforcement Learning



Goal: Maximize reward
Example: Optimize dosage