

K-arm Bandit:

- * K-actions, with rewards for each action.
- Goal is to find the best k-actions.

Problem I Chose: Recommendation System

- * A System for choosing cricket players based on other situations & state

Here Reward is computed based on result of the selected players

- * We balance exploration & exploitation

The bandit learns which players perform well under different scenarios (like Target, RR) using R.Learning.

- * Each arm represents a cricket player

Factors:

- * Pitch conditions
- * Weather
- * Match Situation (Target, RR)

Reward:

- * How well, the selected player performs

Algorithms to try:

- * Epsilon-Greedy
- * Contextual Bandit

⇒ HAVE TO EXPLORE all arms

- * Upper Conf. Bound
- * Thompson Sampling