

HAND CRICKET AI – Q-LEARNING PROJECT

A Reinforcement Learning project where an AI learns to play Hand Cricket using Q-Learning.

OVERVIEW

This project implements an interactive Hand-Cricket game with both AI and human gameplay modes.

The AI uses a tabular Q-learning algorithm to learn batting and bowling strategies by playing simulated matches and updating its Q-table.

Features include:

Coin toss system

Multi-wicket cricket logic

AI learns from human patterns

Training visualization (Matplotlib)

Full 2-innings match system

GAME MODES

Training Mode:

AI trains for 100 simulated matches each (batting and bowling).

Learns against biased and random throw patterns.

Interactive Play Mode:

Human vs AI full match.

Toss, innings, scoring, wickets.

AI learns from your playing style after