

## CSCI 3202 — Mancala AI: Intermediate Report

Rules implemented per course handout: 6 pits/side, 4 stones/pit; skip opponent Mancala;  
NO extra turn on own Mancala; capture on empty pit; sweep remaining stones at end.

Random vs Random (100 games): P0 win%=50.0, P1 win%=45.0, tie%=5.0, avg turns=43.51, avg runtime=0.0002s  
Estimated first-move advantage: 5.0 percentage points

Alpha-Beta (depth=5) vs Random (100 games): P0 win%=94.0, P1 win%=4.0, tie%=2.0, avg turns=31.75, avg runtime=0.0

Notes: Depth=10 experiments are parameterized in code but omitted here due to runtime constraints.  
You can increase N and depth locally for the final report.