Attempt: Play two dumb contenders against each other. For each game, get last 100 states for each contender and label and save these states. Use logistic regression to find a theta. Use theta for protagonist. Feature vector includes bias term, radial vector and number of cards opponent has.

Result: Player 0 won: 0.245, Player 1 won: 0.755 (with 100 games)

Features:

Theta:

[-0.0059915940788338, -0.09213715679025386, -0.07698594976664712,

-0.13760528560431462, -0.06779767045419166, -0.03993002224539615,

-0.10939609377272144, -0.0660294761450333, -0.06856388694870028,

-0.04487065930804504, -0.08412453280784861, -0.11653139900565679,

-0.08711103769250582, -0.0840429476827378, -0.0743778495410734]

Result: Player 0 won: 0.513663, Player 1 won: 1-0.513663 (with 10,000 games)

Theta:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |
| 1 | 0.5342 | 0.2647 | 0.1407 |  |  |
| 2 | 0.7461 | 0.5401 | 0.2571 |  |  |
| 3 | 0.8533 | 0.9151 | 0.7848 |  |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |