

Russell Kook

Jia-Jia (Jay) Lin

russtkook\_jial8\_dbg\_agent.py

russtkook\_jial8\_sbg\_agent.py

### Assignment 3 for CSE 415, Winter 2020, University of Washington

#### Deterministic Simplified Backgammon Agent

- Who did what:
  - Agent Class: Jay
  - Static Evaluation Function: Jay
  - Mini-max Search: Russell
  - Alpha-Beta Pruning: Jay
  - Defining “successors” and “other” method: Russell
  - Debugging: Russell
  - The Report: Jay
- How the static evaluation function works.
  - The function takes in the current state of the board and counts the number of red pieces and white pieces in certain locations.
  - It counts the number of red pieces in its home board and stores the sum, and the same for white.
  - Finally, it returns a number: the difference of white (positive for maximizing player) minus red (negative).

#### Stochastic Simplified Backgammon Agent

- Expectimax: Jay
- Agent class: Russell

#### Partnership retrospective.

- What issues you faced or didn't face related to the partnership:
  - Issues faced: Understanding the spec and collaborating with TAs unfamiliar with the homework was very difficult for both of us. Fixing our homework after spec updated during the week was also confusing.
  - Didn't face: had similar schedules, met up to work on the project together often
- Any lessons you learned as a result of working in this partnership:
  - Should start even earlier to have more time to understand spec and ask questions to the professor and on Ed.