Gin Rummy EAAI Undergraduate Research Challenge

Contest

- Research challenge teams should have at least one undergraduate student and at least one faculty mentor. Interested teams should contact Todd Neller <tneller@gettysburg.edu>.
- The **purpose of the contest** is to encourage faculty-mentored undergraduate researchers to experience the full life-cycle of research. This includes not only research implementation to be tested through competition, but also the writing up of research results, submission to peer review, publishing, and presentation at the EAAI-21 Symposium, collocated with AAAI-21. See details below.
- The **object of our research challenge** is to develop the best AI for Gin Rummy play within time constraints of 30 seconds per player per **game** (not hand) when executed on an Intel Core i9-9880H CPU (2.3 GHz).
- This is the latest distribution of the Java <u>base code</u> with an <u>Eclipse project zip file</u>.
- If teams would like to develop in a language other than Java and the faculty mentor is willing to provide a Java interface to such code, I will try to accommodate.
- Timeline:
 - By the early summer of 2020, code will be provided that runs a tournament for multiple AI players. The tournament code will implement an ELO system and judge tournament winners based on average ELO rating throughout the tournament.
 - AI player submissions compatible with our base case are due one month before the AAAI-21 paper submission deadline, likely early August. (This will allow time to write up and submit research results.)
 - Research papers will be submitted **by the AAAI-21 submission deadline**, likely early September, to a special undergraduate research paper track of EAAI-21, collocated with AAAI-21, and sharing the same submission system.
 - Papers will be peer-reviewed. Accepted papers will be presented at EAAI-21, February 3-4, in Vancouver, British Columbia, Canada and published in the AAAI-21 proceedings.
 - Competition results will be shared privately with teams after the submission deadline and before EAAI-21, and will be shared publicly at EAAI-21 with a cash award from SIGAI to be announced.

Tiny URL: https://tinyurl.com/ginrummyai

Todd W. Neller