AI-Assisted Development of an Interactive Platform for Some Combinatorial Games

Aayan Deb*, Rhodes College; Soumitro Dwip, Rhodes College; Eric Gottlieb, Rhodes College

In summer 2025, we developed an interactive platform for playing a suite of combinatorial games on integer partitions. We describe the process by which we used to develop the necessary code. We used several AI models in domains with which we had little familiarity to speed up the development process. Apart from multiplayer capabilities, the most notable feature we implemented was the "analysis-mode" feature. This feature was instrumental in simulating results for further academic investigations of the games, in particular the "Corners" game.