
Candidate Interest #3

Hnefatafl Engine

Hnefatafl -viking chess- is a medieval scandinavian board game derived from the family of [tafl board games](#). There are many different [versions and interpretations](#), but the general idea is that a king must be protected from being surrounded by the attacking pieces which outnumber the guards. The board can vary above a 9x9 size. It is somewhat similar to Go in the way piece captures interact, but all the pieces move like a rook in chess. The king can escape by reaching one of the four corners, or in some variants by being surrounded on the board edge by his guards. There is one [paper](#) that exists on typical AI explorations for this specific game.

This project can focus on implementing AI to play the game and/or emulate aspects of game playing cognition. It could likely include general game artificial cognition, where an agent might be able to cross between a game like Chess and Hnefatafl yet maintain stability holding to each game's respective strategy. For the Hnefatafl family of games it might be important to simulate how a human can switch between several rulesets and board configurations yet maintain a cohesive imperative, where a computer would struggle to adapt.