

Hi Josep, Rowan, and Zach,

This is an excellent proposal. It's a very rich and challenging one, but well designed/divided to maximize feasibility. As it's so ambitious it'll be good to have a phased plan with different levels of implementation. That way you can start building as simple an initial version as possible to be sure there's a complete running system, and can then add/enrich functionality as time permits.

I had a question from reading "the reasoner's cases will be based significantly on rules of thumb (e.g., when the king has castled, it is unwise to move any of the three pawns in front of it)". From this it sounded as if your system might track historical context---previous moves---in addition to simply assessing positions. I could see the history being very useful, but of course that could add an additional layer of complexity. It might make sense to start without that but to design the system with it in mind as a potential refinement later.

I like the evaluation approach. As the task is very difficult, for the evaluation vs a human, a criterion could be how much better it does against a human than the minimax version (rather than absolute performance against a human).

I also like the rationale in general for trimming a search space (giving importance beyond chess per se).

Please let me know if I can help on any questions, and I'm looking forward to seeing how your work develops!

David