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Call For Papers

Special Issue on Advances in Computer Chinese Chess

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Guest editors

In the development of artificial intelligence, the exploration through board games has been a foundational aspect of computational research. With its intricate complexity and strategic depth, Chinese chess has often been at the forefront. However, following AI's notable victories over human champions in Go, the focus has broadened to include other intellectually challenging games that present new avenues for AI research. Computer Chinese Chess (Xiangqi) has emerged as a particularly intriguing field, blending strategic depth with a rich cultural and historical backdrop.

The field of Computer Chinese Chess has rapidly evolved into a dynamic area of study, driven by the ambition to develop algorithms and systems capable of mastering this ancient game. This evolution mirrors the broader narrative of AI development, transitioning from early heuristic-based methods to cutting-edge advancements in machine learning and deep learning technologies. Reflecting on this journey, it is noteworthy to mention the first Computer Chinese Chess competition, which took place in London in 1989. This event marked a significant milestone in the history of AI in board games, showcasing the potential of AI in mastering games beyond traditional Chess and highlighting the global interest in Computer Chinese Chess.

This special issue captures the current research landscape, innovation, and contemplation within Computer Chinese Chess. It invites contributions that push the boundaries of AI capabilities and deepen our understanding of the game's strategic complexities. As we delve into Computer Chinese Chess's intricacies, we invite researchers, practitioners, and enthusiasts to share their insights, discoveries, and reflections. This special issue seeks to be a confluence of technical rigor, strategic analysis, and historical perspective, charting the course for future advancements in the field.

We encourage submissions covering a wide range of topics, including but not limited to:

- Advances in AI algorithms for Computer Chinese Chess.
- History of the development of Computer Chinese Chess.
- The impact of Computer Chinese Chess on AI research.
- First-hand accounts of early Computer Chinese Chess tournaments.
- Understanding how Computer Chinese Chess tournaments influenced competitions in other disciplines.
- Analysis of trends from the competitions.
- Data analysis of the competitions (e.g., program speed, ratings, machine capabilities, memory size).
- Lessons learned from the competitions.

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- Understanding non-scientific contributions from the competitions (e.g., media impact, public awareness, education).
- Documenting historic artifacts, including source code, papers, pictures, first-hand accounts, etc.

Authors should follow the standard *ICGA Journal* style and identify their papers for this special issue. Submissions for full articles should be 8 to 12 pages long. Short notes of 3 to 6 pages are also invited.

- **Deadline for submissions:** September 1, 2024
- **Notification of acceptance:** November 1, 2024
- **Final copy due:** December 1, 2024
- **Publication:** TBD