

Editorial

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The June 2018 issue of the ICGA Journal is a special issue on Chinese dark chess, guest edited by Prof. Shun-Chin Hsu. Although Chinese dark chess shares the same game pieces and half of the game board of Chinese chess, the two games are very different. Chinese dark chess, being stochastic and with imperfect information, poses many interesting research problems. We include three such contributions, which Hsu will introduce in more detail below.

In addition, we include two articles which may be of interest to our most loyal computer chess readers. The first article by Kasparov and Friedel, *Reconstructing Turing's "paper machine"*, retells the story of Alan Turing's attempt at computer chess before programmable computers were even invented, and the actual implementation of his algorithm into a program. Turing, being the extraordinary man that he was, used concepts that we are now familiar with, such as quiescence and the broad strokes of alpha-beta pruning.

The second is a report on the 10th Top Chess Engine Championship (TCEC) by Haworth and Hernandez. TCEC is known for having the platform for web-based championships, the attention of many of the best engines, the interactive audience and the funding. I want to thank Guy Haworth and Nelson Hernandez for writing and sharing this report so that we may publish and archive the results here at the ICGA Journal.

I-Chen Wu

We include in this issue the game of *Chinese dark chess (CDC)*, which is a two-player zero-sum stochastic board game. CDC is widely played in Taiwan and China. Many CDC tournaments were held since 2010, including the Computer Olympiad, TAAI and TCGA. Game researchers have investigated and published papers related to game tree search, endgame databases and deep learning for CDC. Below are brief descriptions for the three papers in this issue.

The first contribution in this issue by Hung-Jui Chang, *et al.* proposes a scheme to validate an evaluation function by using the information from endgame databases, and then discovers meta-knowledge to fine-tune the evaluation function.

The second contribution by Hung-Jui Chang, *et al.* focuses on the analysis and efficient solutions for a reduced version of CDC, named 2×4 CDC. The article finds the best strategy when choosing a square to flip, and discusses the fairness of the opening positions.

The third contribution by Chu-Hsuan Hsueh, *et al.* presents three metrics that are used to measure the strength of game-playing programs. These metrics include win rates, prediction rates, and mean squared errors.

The aim of this special issue is to promote research in CDC and to encourage more researchers to get involved.

Shun-Chin Hsu