Theme: Generating Chess commentary using transformer architecture

Learning to Generate Move-by-Move Commentary for Chess Games from Large-Scale Social Forum Data

Provides state of the art dataset for training chess commentary AI’s, together with a proposed approach for such bots.

Contains a dataset selection and preprocessing information, together with proposed model and results.

Sections: 7; Subsections: 9; Citations: 20; References: 25

ChePT - Applying Deep Neural Transformer Models to Chess Move Predicton and Self-Commentary

Describes a transformer based approach for chess commentary, trained together with a chess engine. Does not work with the categories defined in the paper above, but utilizes the same dataset.

Contains details both about the dataset for each of the goals, and the models for each of the goals.

Sections: 7; Subsections 14; Citations: 0; References: 25;

Automated Chess Commentator Powered by Neural Chess Engine

Describes a more complex approach, with 5+ models working together to achieve the same goal of the first paper.

Contains details about each model which contributes to the result, and evaluation metrics for each.

Sections: 5; Subsections: 9; Citations: 7; References: 27

Enhanced Transformer Model for Data-to-Text Generation

Attempts to utilize transformers in order to generate commentary for NBA games. Utilizes an unique architecture.

Describes unique architecture, reasoning behind it and results.

Sections: 8; Subsections: 7;Citations: 10; References: 21

Transformer++

Presents an improved transformer model for the original language translation .

Describes the differences between the original and new architecture, and shows results.

Sections: 5; Subsections: 4; Citations: 0; References: 36

**Bibliography**

Harsh Jhamtani and Varun Gangal and Eduard Hovy and Graham Neubig and Taylor Berg-Kirkpatrick. Learning to Generate Move-by-Move Commentary for Chess Games from Large-Scale Social Forum Data. In *The 56th Annual Meeting of the Association for Computational Linguistics (ACL), pages 1661-1671.*

Colton Swingle and Henry Mellsop and Alex Langshur. ChePT – Applying Deep Neural Transformer Models to Chess Move Prediction and Self-Commentary. In *Stanford CS224N Naturla Language Processing with Deep Learning, report087.*

Hongyu Zang and Zhiwei Yu and Xiaojun Wan. Automated Chess Commentator Powered by Neural Chess Engine. arXiv preprint arxiv:1909.10413v1

Li Gong and, Josep Crego and Jean Senellart. Enhanced Transformer Model Data-To-Text Generation. *In Proceedings of the 3rd Workshop on Neural Generation and Translation (WNGT 2019), pages 148–156.*

Prakhar Thapak and Prodip Hore. Transformer++. arXiv preprint arxiv:2003.04974v1