

ECS7022P: COMPUTATIONAL CREATIVITY

PROJECT PROPOSAL

While Artificial Intelligence is considered to be the 'new electricity' of the new industrial revolution Industry 4.0. Since its emergence there have been various trends of AI and one of the being Computational creativity. The various examples include – Deep generative models have been used to write Wikipedia articles with relevant factual information and create images that have been auctioned off in art galleries for nearly \$100,000; and people are no better than random guessing when it comes to distinguishing between pieces of music composed by J.S. Bach and by a machine.

The Artificial Intelligence crept its feet into the novel writing and text generator. One of its biggest examples is Jasper.AI (Conversion.ai) that uses artificial intelligence to generate stories and novels. Thousands of writers recommend the tool and is used by them to write entire blog posts. It employs OpenAI's advanced GPT-3 algorithms to generate unique and compelling storyline text based on the text you provide. This tool is also useful for creating anything else, such as a blog post, copywriting ads, newsletters, product descriptions, and so on. It understands what you want it to do better than any other tool on the market, so you can be confident that its output will always be of high quality.

For most of the AI text generator, the Markov chains have been very beneficial in the creation of the system. One such example has been listed in the background materials where an individual as used Markov chains for text generation. Inspired by this creation I plan on implementing a creative system to write short stories by using Markov process. Markov chains are random processes with a finite set of states that transition from one to the other. These sets of state transitions are determined by a probability distribution. I would be utilizing Google Colab for the practical implementation of this project. I also plan to include text generation which is grammatically correct which is dependent on the time constraints of the project.

BACKGROUND MATERIALS

1. <https://aircconline.com/ijaia/V10N6/10619ijaia04.pdf>
2. <https://www.jasper.ai/>
3. <https://ankiewicz.com/technology/markov-generator/#:~:text=Markov%20chains%20are%20a%20mathematical,%2C%20in%20this%20case%2C%20words.>