

FROM DESCRIPTION TO MANGA CHARACTER IMAGE GENERATION

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Abstract

Manga is a Japanese art form, mainly depicted in Japanese comics, that has a wide popularity in the world. But the drawing of these manga take considerable amount of time and resources. Even for professional mangaka, taking up to month to draw a single chapter of a comic strip.

The process to usually drawing a manga consists of a reading of the novel on which the manga will be based upon, then the designing of the characters based on what was read, and then the drawing. Followed by the colouring, mostly not done due to the huge costs involved. This dissertation is the result of the author attempting to automate a key component of this manga creation process, which is the creation of the manga character. The developed system, works by making use of existing GAN systems and well as NLP models, to accomplish this task.

The author then successfully designed, developed and evaluated. A product that automatically generates images of manga characters based on a text description. The said product is available to use through a web interface, which will allow even the most basic users to use the application, without needing any technical expertise or drawing skills to create a manga character image.

Keywords: Manga, Character Image Generation, GAN, NLP, Text to Image Generation.