# Generating Product Description with Generative Pre-Trained Transformer 2

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**Abstract :** Research on automatically generating descriptions for e-commerce products is gaining increasing attention in recent years. However, the generated descriptions of their systems are often less informative and attractive because of lacking training datasets or the limitation of these approaches, which often use templates or statistical methods. In this paper, we explore a method to generate production descriptions by using the GPT-2 model. In addition, we apply text paraphrasing and task-adaptive pretraining techniques to improve the qualify of descriptions generated from the GPT-2 model. Experiment results show that our models outperform the baseline model through automatic evaluation and human evaluation. Especially, our methods achieve a promising result not only on the seen test set but also in the unseen test set.

**Keywords :** GPT-2, product description, transformer, task-adaptive, language model, pretraining

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