

Jiang Chang, Nathaniel Palmer
Lead instructors: Bolden, Bruce
Mentor: Jamil, Hasan

Objective

Generate a large amount of text from a smaller sentence while maintaining the context of the original text.

Background

Generating contextual text from a single segment text is what our client requested of us. Their use case involved being able to explain content in an online learning environment without the need for human interaction and generate marketing ideas for a certain topic.

Value Proposition

- Online Education
- Disable Individuals
- Marketing Ideas
- Quicker Article Generation

Key Requirement

The customer asks for a piece of text that the software can put into a phrase and automatically generate a paragraph of text after the software runs.

Concept Development

Our main area of study of this project is the open AI and AI domains. Using openAi's gpt-2 model we are able to train our own models from large text files. Then using the model we trained we can generate text specific to the compiled file of text.

The model which GPT-2 using a vocab size of around 50000. with max length of 1024 and 12 layers. Their overall text file amounted to around 40GB.

There are several model sizes which you may train from starting at 117M - 1558M. The larger requires much greater processing power and may take longer to generate a result.

Application Design

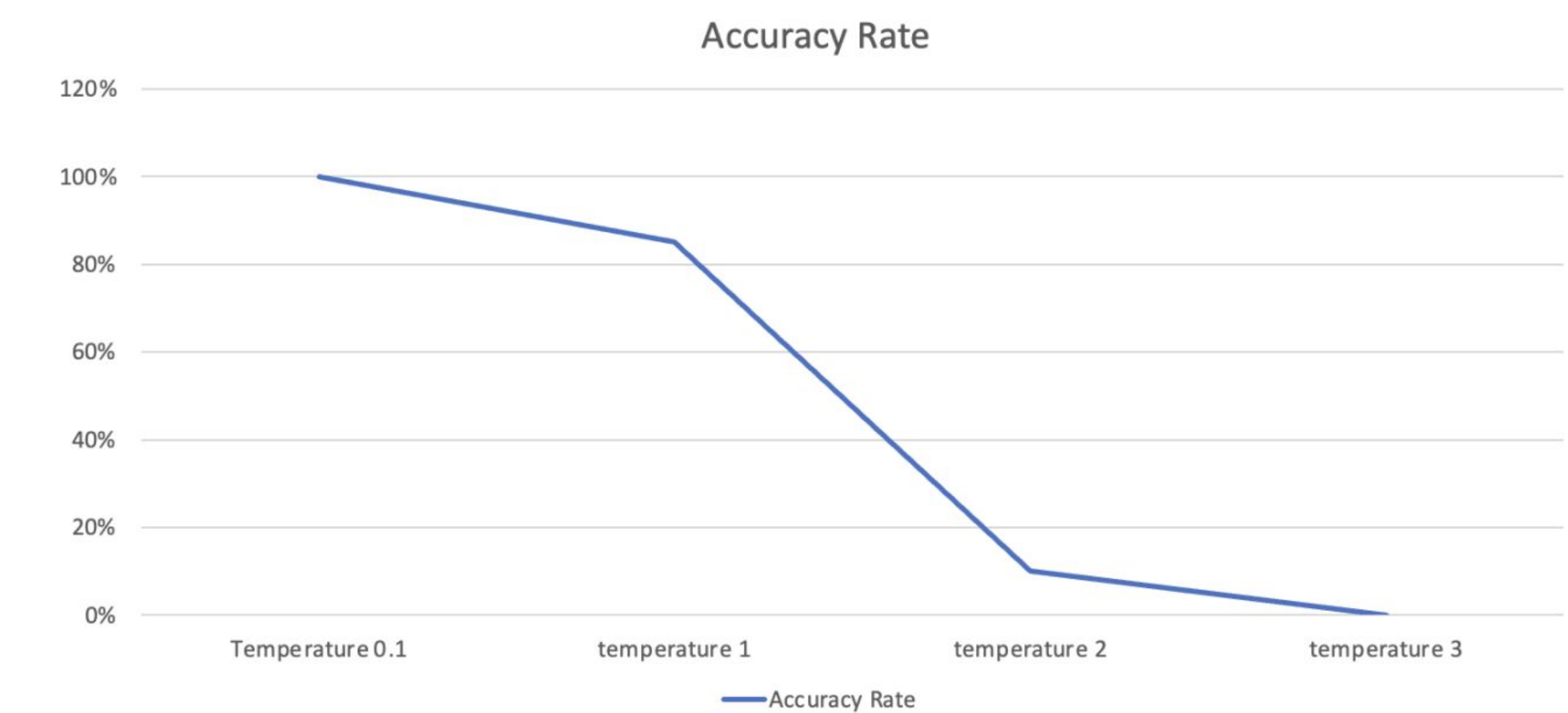
Text Generator Tool

Enter text prompt

Temperature: 1 - 3
Output Length: 1 - 500
Model Name: [bees, alice]
Generate

Skipping along a narrow green road Alice could never have image what was about to happen. But once it had shut into the stone wall, she thought she could see the COLOUR DOWN JUMPING by the side of the road. Her heart pounded. Someone had knocked at her door and broken it. She opened it before it appeared for a while; then she looked back down at a long blue dress that was bright outside. Alice jumped up and ran up to it. It was tied in a knot, but she felt ill at ease. A little while later she heard POLICE behind her; then the kitchen door in the very first minute was knocked and her footsteps remained. And just as everything began to fall into place she instinctively shouted for the FIRST OFFICER. CHAPTER 9 Alice and the CAT The first day was very bright at first, and the most pleasant thing was getting into good health. But for some time she began to wonder whether she ought to pack food for a while, followed by waiting. Alice was anxious about the furniture, and was looking at her list of stars and colours for the first time. Alice didn't have any star or colour in mind, so she went about walking slowly to find all she liked, and stopping once she had seen the first stars she generally forgot where she had been.

Text Generation Analysis



Temperature is a parameter for text generation which has an influence on the texts output.

Summary, Conclusions and Recommendations

This project was really challenging but interesting. We tried a lot of methods but most of them present low performance in grammar and context. With our current product. The grammar and context performs rather well but there is still room for improvement with retaining context and including random sentences.

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