

COSC 480 – Miniproject #2

Task: Using keras, TensorFlow, and Python, create a text generator for a “style” of your choosing.

For this project you will create a python program that will do the following things:

- 1.) Identify and develop a data set for a text style that you’d like to generate. This can be creating a script based on the works of a screenwriter, song lyrics that mimic the style of a band, or even the text on the cards of a game (see RoboRosewater). You must receive approval for your choice of style by **end of class October 11th**. After this date you may not change your choice. Your corpus will need to contain at least 5000 (non-unique) words.
- 2.) Develop a neural network model to analyze the corpus that you’ve used and use it to generate 3 500-word texts that are predicted to match the “style” you chose.
- 3.) Write a short paper detailing your process for data selection and cleanup; what kind of neural network you chose with justification; and your 500-word texts and a critical analysis on whether or not it matches your chosen style.
- 4.) Submit your group’s sufficiently commented notebook file via Blackboard by **11:59pm on October 19th**. This project will be worked on in groups of 3 or 4. We will choose groups in class on October 4th. The header comment for your notebook should include:

File name

Names of all members of the group

Project name and description

Any special execution instruction (extra libraries you had to install, etc.)

Date

Credit: Kaggle for the inspiration.

Point distribution and (some) possible deductions:

Paper 30pts

Corpus development

Neural network justification

Text + analysis

Code 70pts

Lack of comments, including header: -25 maximum

Missing any sets of text generation: -10

Insufficient corpus: -10

No text generation: -70