Shakespeare_script_gen

› Result

We use the following parameters:

```
state_size = 100,
num_classes = vocab_size,
batch_size = 32,
num_steps = 80,
num_layers = 3,
learning_rate = 1e-4:
epochs = 20
```

The generated Shakespeare-like script is

```
HIRI OF ICHERD:
Hell bees should but ance thee,
And shestall that hean heave houng shourded one
thy sollook see that a more tay see how,
There a sechich a masters olly the cournt on hear the chear,
And menting triendy and my sellond, then the best the
That saless the compined his madester.

KING LARENLO:
No see, are songess oun horghand hast on arters.

GLOUMEREN RIO:
He sall'd that thing to be call, a sourth, trick tood.

LEONTER:
That so dost, there hast a wime of a till a mant.

KING II:
A mister, were with his will strang thas witio well thit
And the woor that wish a that he than, hath his are.
With, sill thou tall stele thow sto seed a sucented,
I wisth mest in the will mastied that,
For to the seed tay warth have trenent
An
```

This is an example of the training Shakespeare script:

```
HASTINGS:
So thrive I, as I truly swear the like!

KING EDWARD IV:
Take heed you dally not before your king;
```

```
      Lest he that is the supreme King of kings
      Confound your hidden falsehood, and award
      Either of you to be the other's end.

      HASTINGS:
      So prosper I, as I swear perfect love!

      RIVERS:
      And I, as I love Hastings with my heart!

      KING EDWARD IV:
      Madam, yourself are not exempt in this,
      Nor your son Dorset, Buckingham, nor you;
      You have been factious one against the other,
      Wife, love Lord Hastings, let him kiss your hand;
      And what you do, do it unfeignedly.

      QUEEN ELIZABETH:
      Here, Hastings; I will never more remember
      Our former hatred, so thrive I and mine!

      KING EDWARD IV:
      Dorset, embrace him; Hastings, love lord marquess.
```

We can see that the similarity between the generated text and the original one is almost to the level words. But the generated text still have too many misspelled words. A comparison can be drawn with the known Karpathy's Shakespeare results (http://karpathy.github.io/2015/05/21/rnn-effectiveness/#shakespeare). There the text is much more readable. The difference is that the hidden unit size (ie state_size) he uses is 512, while mine is 100 for the sake of saving time consumption. Also he uses a much larger corpus, while mine is a tiny version of the Shakespeare script. So this model is expcted to have better performance with more parameters and larger data set.