MOVIE SCRIPT GENERATION

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Problem Statement

- Our goal is to recreate a popular movie script generator.
- We strive to improve the current model - through corpus manipulation and changing the training parameters - and to develop evaluation strategies without subjective human evaluation.

OLDER

DENE
Shouldn't want to reco averge.

WILLTESTER
Oh. Fellowmod does
gets last giggy Aliam-Look
through it's you to go, I know
lovely.

CAROL
Even if I need something how
busy pirated as oul pet-ovin on
the Louder.

VILMAN
Or more below labby. It's
about me?..?

NEWER

T5
(laughing)
I don't know. I need to read this.

W55
I have a lot of twisted portrait
in the newspaper.

W55
(turning away)

O54
It's on the roof of your life.

W55
What do you want me to do?

T5 looks at himself in the side of
the couch, more
moved by the shot.

Overview

- Used a RNN model to recreate Ross Goodwin's movie script generator, who used work from Andrej Karpathy's char-rnn to train a model on science fiction movie scripts.
- Torch-rnn – a character based model – allowed us to create several untrained models.
- Our training data consisted of the IMSDb collection of comedy scripts totaling 347 movie scripts
- A second goal focused on improving the model through data manipulation and changing the training parameters. We created multiple untrained models in order to train them differently.

Script by Ross Goodwin

H (CONT'D)
It may never be forgiven, but that is just too bad. I have to leave, but I'm not free of the world.
C
Yes. Perhaps I should take it from here. I'm not going to do something.
H
You can't afford to take this anywhere. It's not a dream. But I've got time to stay there.

shot with real Hollywood stars!

Data Manipulation

- To improve the production of a plot line, we sectioned the training scripts into tenths and labelled them.

```
tenth_1              M1
tenth_1 I can't believe you
...
tenth_10             M1
tenth_10 When Joe died all those years ago...
```

Training Parameters

- batch size: the # of streams of data that are processed in parallel
- dropout rate: forces the model to learn multiple representations of the same data

Sampling Parameter

- temperature: determines the riskiness of the model

Evaluation

- For our evaluation, we wanted to use a numerical calculatable measurement opposed to subjective human evaluation. We considered the following areas for evaluation: grammar, spelling, the number of characters, the frequency of a character's dialogue, the number of characters involved in a conversation, the coherency of the plot, creativity, etc. With limited time, we chose to focus on the number of characters and the frequency of a character's dialogue.

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