# Youtube Popular Travel Video Title Generator

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# Background

- Content Creators want to optimize their video view counts. In order to do so, it is important to have a Video title that resonates with viewers.

- Video titles are typically chosen manually. **Can we build a predictive model to generate video titles from a seed word?**

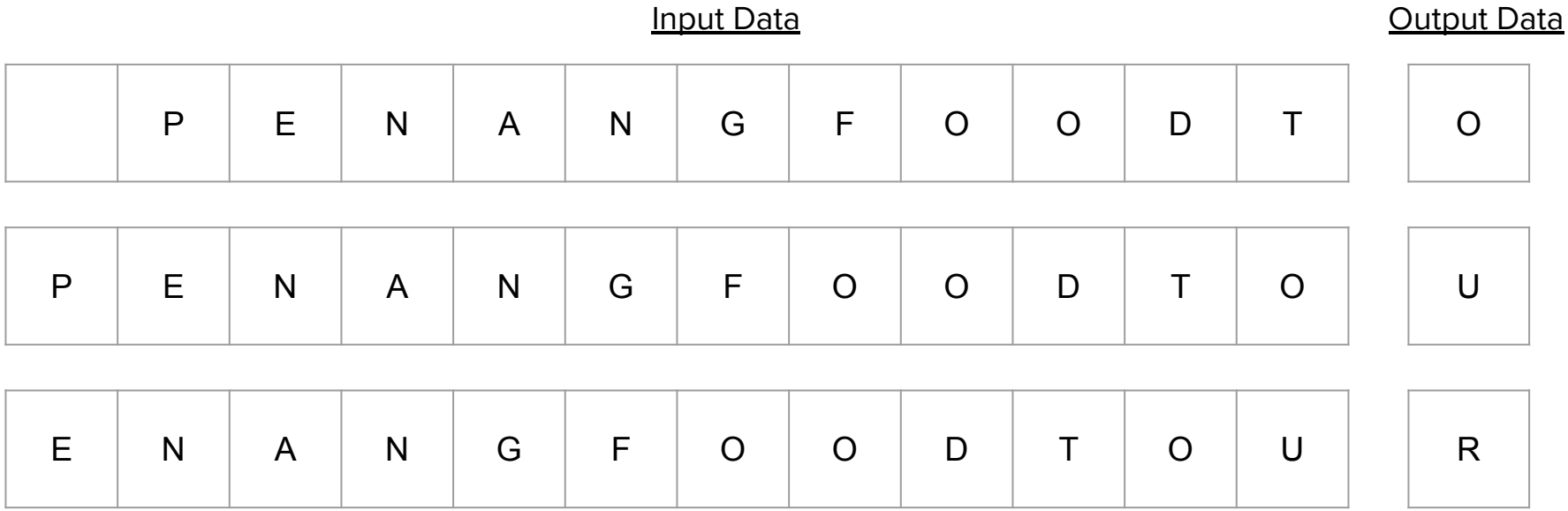

# Data

Video Titles of Popular Travel Videos Obtained from Youtube API

| |
|---|
| 10 Best Places to Visit in Malaysia - Travel Video |
| How to Spend 14 Days in Japan - A Japan Travel Itinerary |
| Exploring Penang (Georgetown): Things To Do in One Day |
| Mumbai Places to visit \| Mumbai Tour Plan & Mumbai Tour Budget \| Mumbai Travel Guide |
| Bali Travel Guide - How to travel Bali for First-timers |

- What **text patterns** are common in popular Youtube travel video titles?
- Can a **deep learning model help us generate** these titles for future videos?

# Data Processing




In order to create data for LSTM, sequences were created with fixed length, and by sliding the text

# Model Architectures

Input

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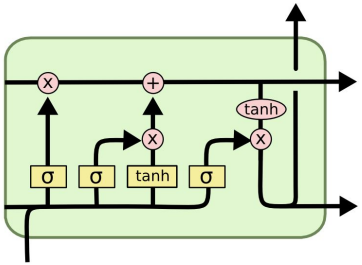
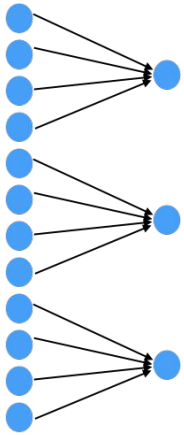
LSTM Model




Linear Model



Output

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LSTMs are an ideal choice for this, as they can process sequential information due to their memory cells

# Let’s try the Generator in Action:

Youtube creators start off with some seed text, and want to generate a good title. Let’s see it action:

| Seed Words | | Generated Titles |
|---|---|---|
| *“Europe advice”* | | *“Europe advice of air ane around ianamia travel”* |
| *“Japan places”* | | *“Japan places to visiting  and angalore”* |
| *“Shanghai food”* | → LSTM Generator → | *“Shanghai food ange road trips olone road trip”* |
| *“Walk around”* | | *“Walk around ianamia travel vlog”* |
| *“Street Food”* | | *“Street Food tourist an travel vlog”* |

There is some bits of logic in our output, but clearly there’s a lot of room for improvement!

# Next Steps

- Improve the model architecture and data selection/preparation for this current model
- Implement **word predictions** rather than character predictions
- Implement **bidirectional LSTM** to generate text in both directions