

A decorative network diagram in the top-left corner, featuring a complex web of interconnected nodes and lines. Some nodes are highlighted with blue circles, and others with blue dots. The lines are thin and grey, creating a subtle background pattern.

High-Ku

Beatriz A. Miranda | Project Fletcher

A decorative network diagram in the bottom-right corner, similar to the one in the top-left, featuring a complex web of interconnected nodes and lines. Some nodes are highlighted with blue circles, and others with blue dots. The lines are thin and grey, creating a subtle background pattern.

Hello!

I'm High-Ku

Forgive me for being
nonsensical
sometimes, I like
nature too.

You can find me in twitter at:
[@the_high_ku](https://twitter.com/the_high_ku)



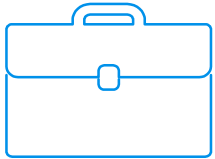
A decorative network diagram in the top-left corner, featuring a complex web of interconnected nodes and lines. The nodes are represented by circles of varying sizes, some with concentric rings, and the lines are thin and grey. The diagram is partially cut off by the top and left edges of the slide.

1.

Initial Process

Gather & Prep Data

Data Collection & Storage



Phase 1:

- ◎ Scraped from www.haikuguy.com (10,000)
- ◎ Haikuzao 'haiku.txt' (4,978)

Phase 2:

- ◎ Initial cleaning pre-processing
- ◎ Stored in MongoDB

Topic Modeling

Seasons & Date | Nature



Topic 1 : “on new year's day a cute little pilgrim at the gate”

Topic 2 : “plum blossoms fall in the hairdo lowering the basket”

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2. **LSTM Model**

Creating & Training



Understanding LSTM (Long Short-Term Memory)

- Recurrent Neural Network (RNN) architecture
- Contains feedback connections (loops)
- Weights of connections determine how “gates” operate

Key Components

- Cells
 - Input Gate
 - Forget Gate (‘Keep’)
 - Output Gate
- 

A decorative graphic at the top of the slide featuring a network of interconnected nodes and lines. A central node is highlighted with a dashed circle and a solid circle, containing a large blue quotation mark.

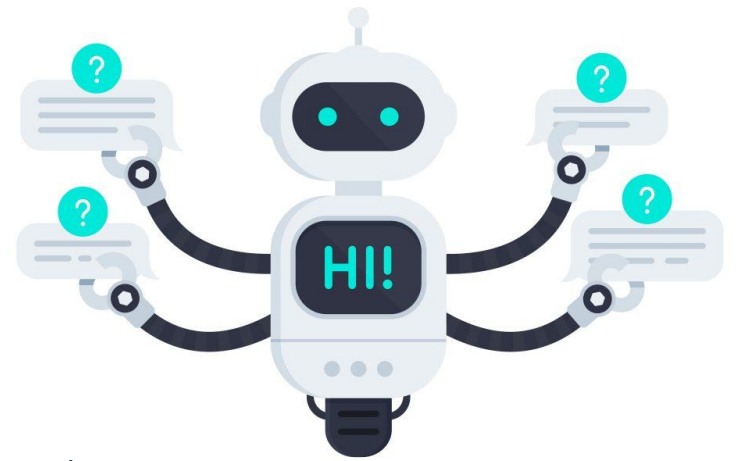
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“Le passé qui ne passe pas”

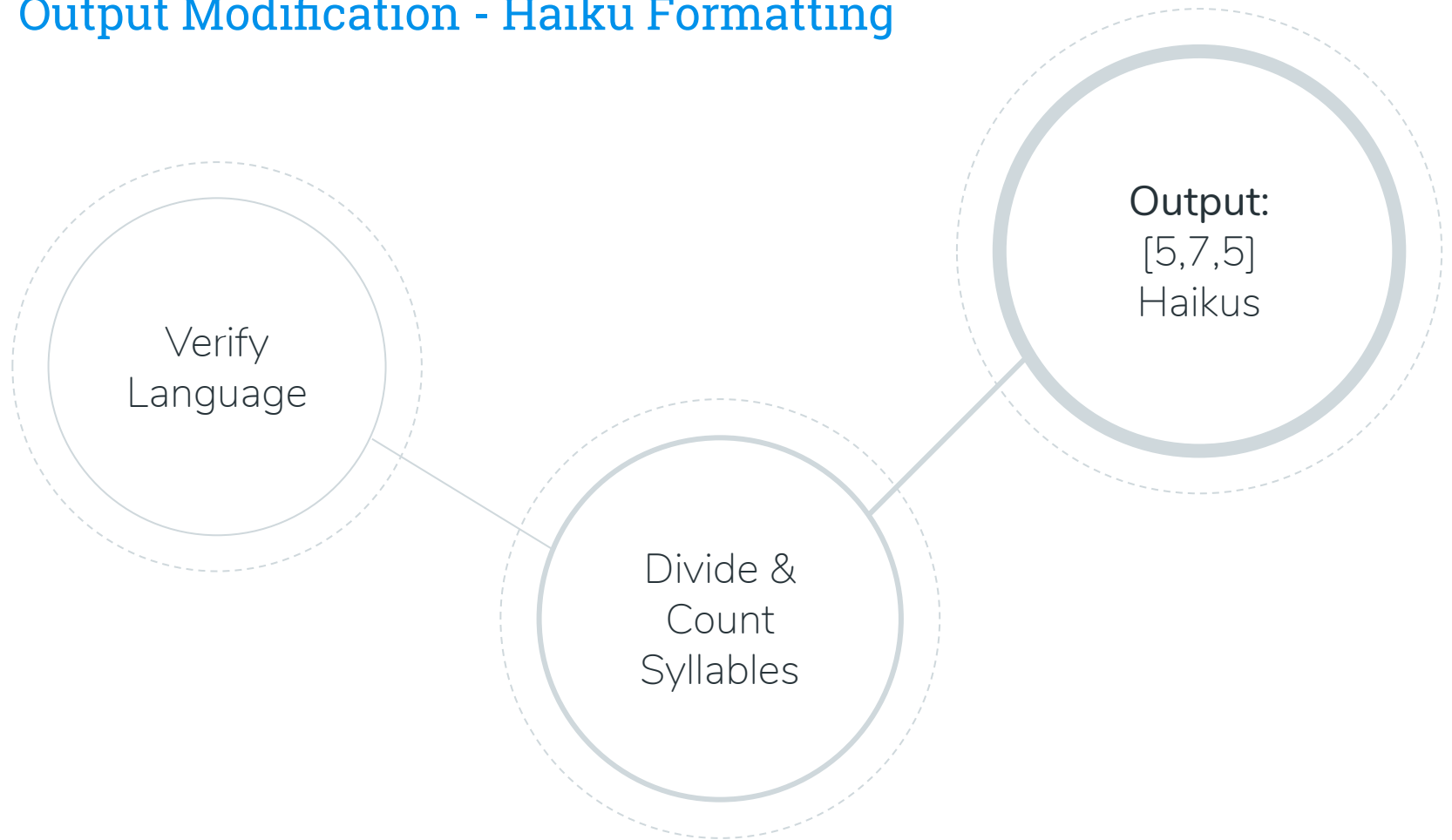
“The past that does not pass away”

Model Deets

- Sequential
- LSTM = 256 units
- Dropout = 0.2
- Dense = activation('softmax')
- Loss = 'categorical_crossentropy'
- Optimizer = 'adam'

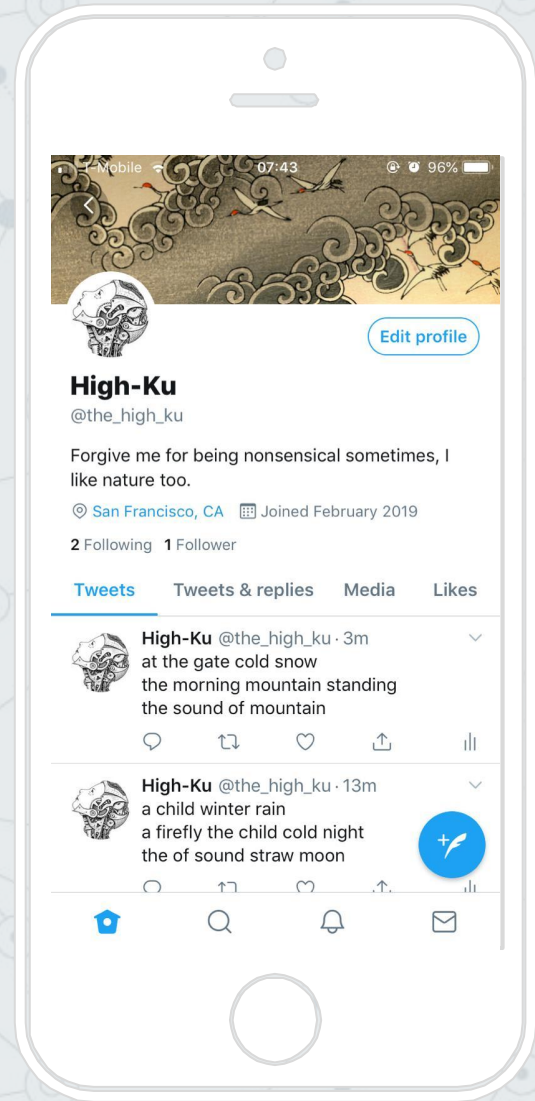


Output Modification - Haiku Formatting



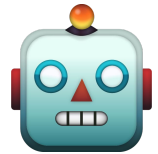
the_high_ku

Twitter bot that automatically generates haikus every 10 minutes!



Lessons Learned / Ideal Situation

CLEAN YOUR DATA | CLEAN
YOUR DATA | CLEAN YOUR
DATA | CLEAN YOUR DATA



WANTED TO

Spend more time
preprocessing
data

Train model with
proper syllable
count

Experiment with
+ layers

WILL DO

More 'logical'
constraints

Reply haiku when
tweeted at

Thanks!

Any questions?

