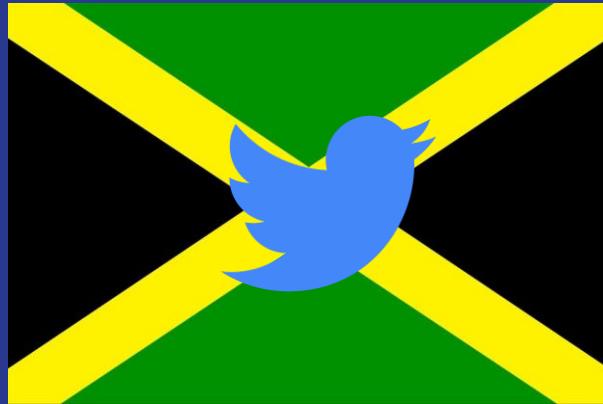


Aty

The Jamaican Twitter Bot



What does it do?

- Aty is a twitter bot that is able to tweet about stuff relevant to Jamaica in Jamaica Creole (Patois).
- This includes exchange rates, trending topics, events.
- Able to understand and reply to tweets in the jamaican language.

What I worked on?

- Event Tweet Feature - Bot scrapes the web for jamaican events/parties and tweets about them
- Retweet Feature - Bot finds trending topics from jamaica or related to jamaica and retweets tweets on these topics
- Reply Feature - Bot is able to reply to a question or tweet from another twitter user in the jamaican language

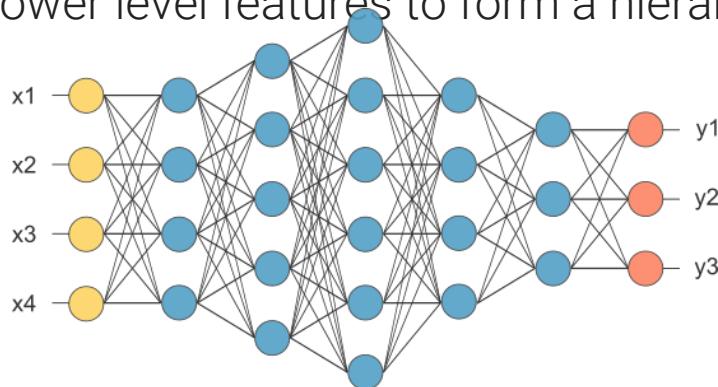
How does it do it?

- The web scraping was done using a python library called Beautiful soup. This library was used to extract relevant information on events from popular Jamaican event websites.
- The Tweepy library was used to hook into the Twitter api and find tweets on a trending topic. The API allows you to filter tweets based on location.
- The reply feature was achieved through a specialization of machine learning called deep learning (Tensorflow).



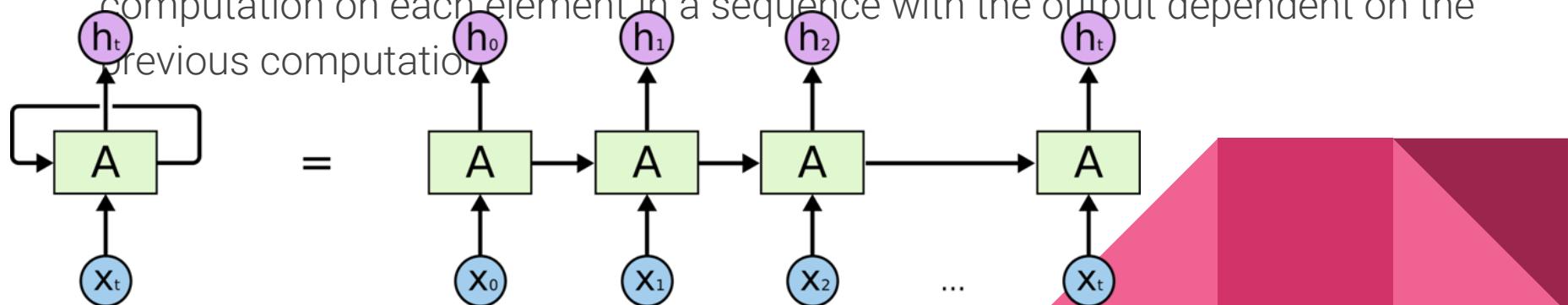
Deep Learning and NLP?

- NLP - Natural Language Processing is a field of AI concerned with the interactions between computers and human languages.
- Deep Learning - based on the (unsupervised) learning of multiple levels of features or representations of the data. Higher level features are derived from lower level features to form a hierarchical representation



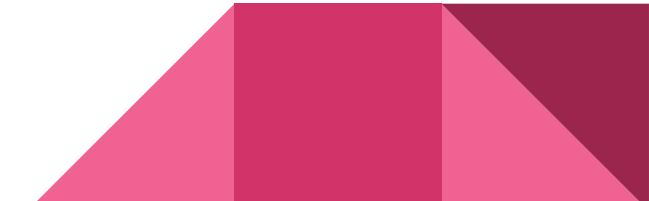
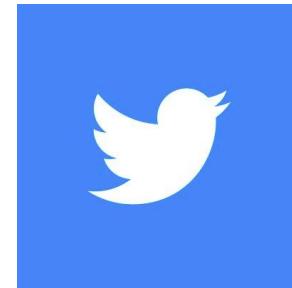
Neural Networks(RNN,LSTM's)

- Training corpora was gathered from tweets and replies from popular jamaican accounts.
- Recurrent Neural Networks - Makes use of sequential information
- Has a memory of what has been calculated so far, performs the same computation on each element in a sequence with the output dependent on the previous computation



What can it be used for?

- Marketing Tool - Aty could be used as a real time marketing tool that feeds off trends on social media and crafts more targeted marketing campaigns.



My Calico Experience

- The calico programme allowed me a way to learn and practice my passion of Artificial Intelligence
- My mentor gave me the freedom to be creative.
- Several areas in A.I don't seem as daunting as it did when I started the programme

Conclusion

- Overall I am very pleased that I signed up for the Calico program, because it has allowed me to practically implement the various things i've been learning and it has allowed me to learn new things which I am always pleased to do.
- It has allowed me to work with people I may not have gotten the chance to work with before. I would definitely recommend the Calico programme.