

CREATIVE CODING

with p5.js

Text Fractal tweak 文本云 by Isabel Li
<https://openprocessing.org/sketch/1882378>

Markov chain

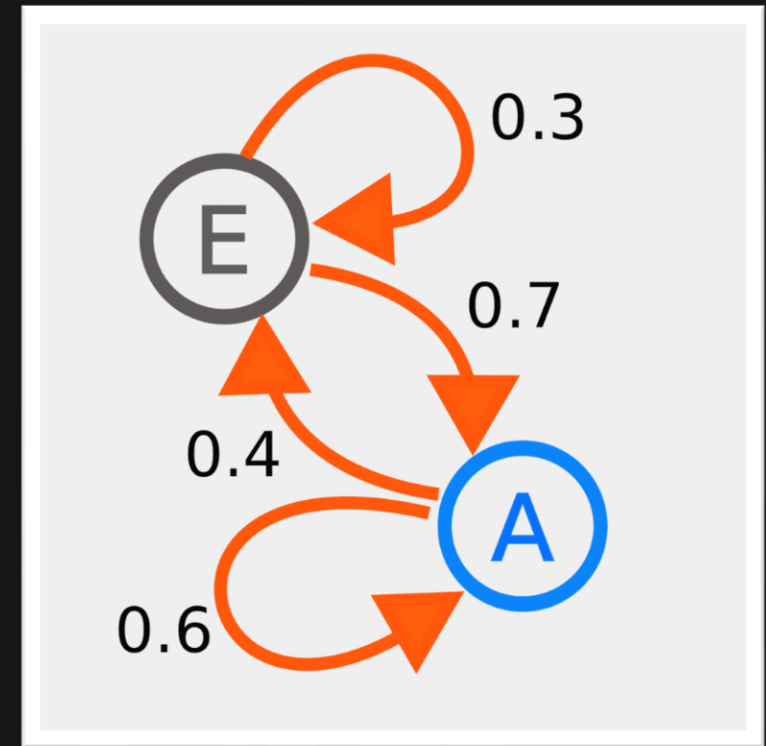
- Named after mathematician Andrey Markov
- The aim of using Markov chains is to provide probabilities for the occurrence of future events.
- Markov chains are used in many fields:
 - Physics
 - Chemistry
 - Biology
 - Testing
 - Games
 - Music
 - Baseball
 - Text generation
 - And many more!



https://en.wikipedia.org/wiki/Markov_chain

Markov chain abstract example

- We describe the probability from 0-1, whereas 0 = 0% and 1 = 100%
- As shown in the image, we can have multiple states (E and A)
- All states needs to have a summed up probability of 1
 - E: $0.3 + 0.7$
 - A: $0.4 + 0.6$
- State E has a chance of 0.3 (=30%) to go to state E and a 70% chance to change the state to state A.



Examples

 **Markov Bot**
533 Tweets



Follow

Markov Bot
@MarkovTop100

Generates Tweets using a Markov Chain created by the Top 100 most popular Twitter accounts.

github.com/mabotkin/markov... Joined May 2016


0 Following 7 Followers

Tweets Replies Media Likes

 **Markov Bot** @MarkovTop100 · Jun 15, 2016
Back to b promoted at a deal, source says. cnn.it/21j9unV Democrats chant where's the places for the



<https://twitter.com/markovtop100>



Headline Smasher
Real news remixed into fake news.

Sign Up Sign In

Explore Smash

Leaderboard Random

Top Hot New

Search

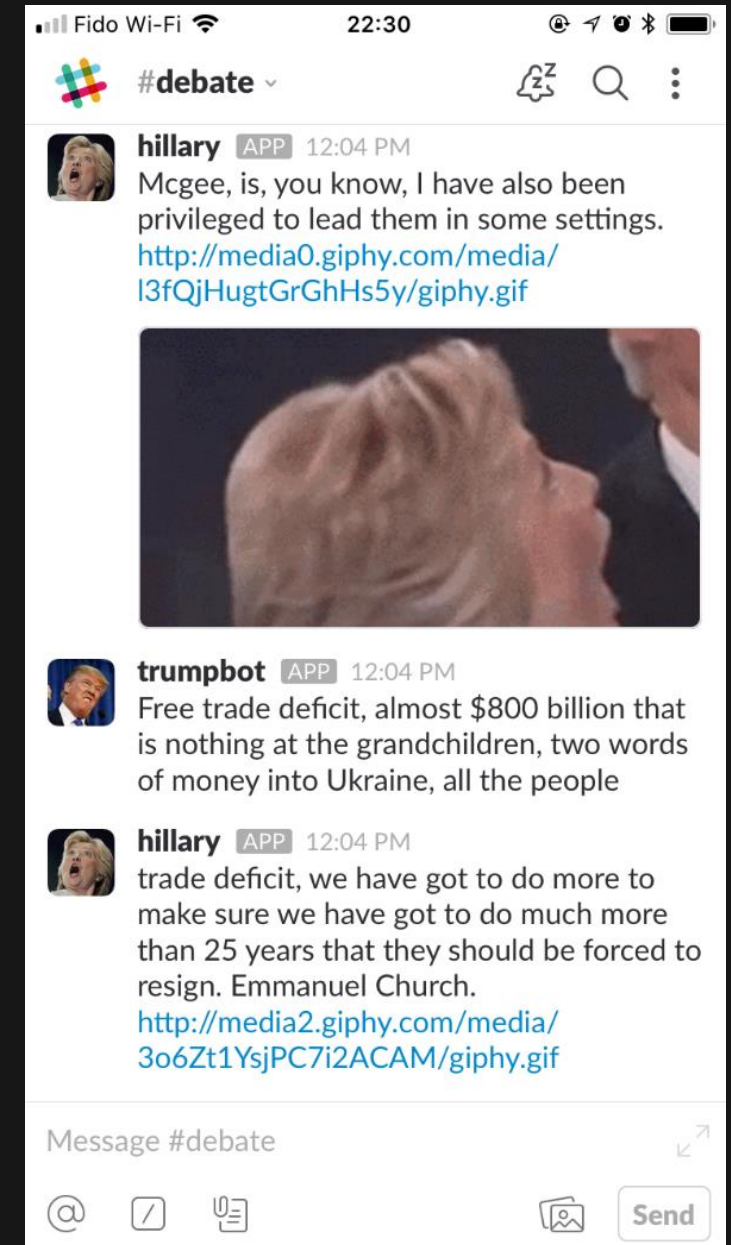
Week Month All Time

84	Vote	Every Dog Has His Law License Suspended	1 1 1
50	Vote	Welcome to the Groin	1 1 1
50	Vote	How We Met: "He Arrived at My Wedding"	1 1 1
34	Vote	Why Dogs Are Made?	1 1 1
22	Vote	Whoopi Goldberg Confronts "The View" After Her Death: Photos	1 1 1
15	Vote	Lindsey Graham Drinking Out of My Vagina	1 1 1
15	Vote	Speaker McCarthy Says It's Time for International Bat Appreciation Day	1 1 1
10	Vote	Serena Williams Husband Calls Himself "The Best Is Yet to Come"	1 1 1
10	Vote	18 Northern US States Will Be Restarted	1 1 1
8	Vote	House of the Dragon's Dragons Smell Like Cream	1 1 1
8	Vote	The "Fizzling" Dating Trend Encourages You to Overlook When It Rains	1 1 1
7	Vote	How to Blow Over 60	1 1 1

<https://github.com/wilg/headlines> | <https://headlinesmasher.com/>

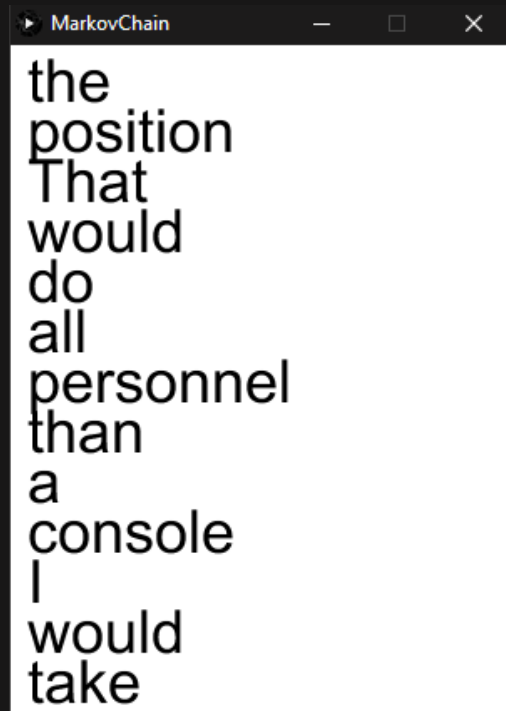
Examples

- An automated Slack bot designed to debate against <https://github.com/414owen/TrumpBot>



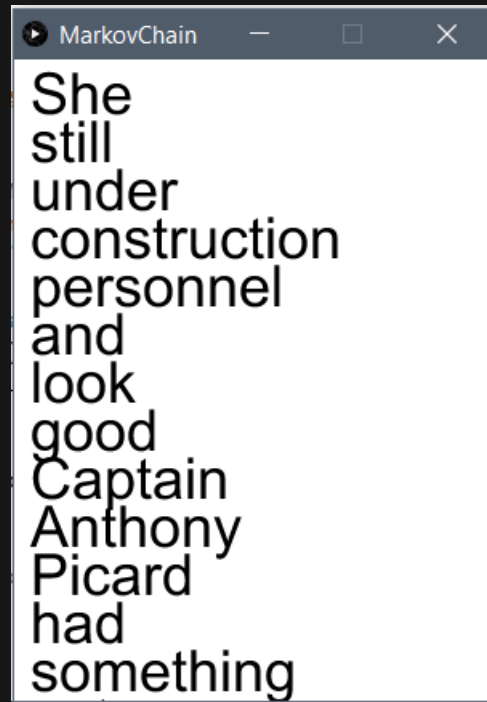
<https://github.com/bubba/Hilary-bot>

Examples



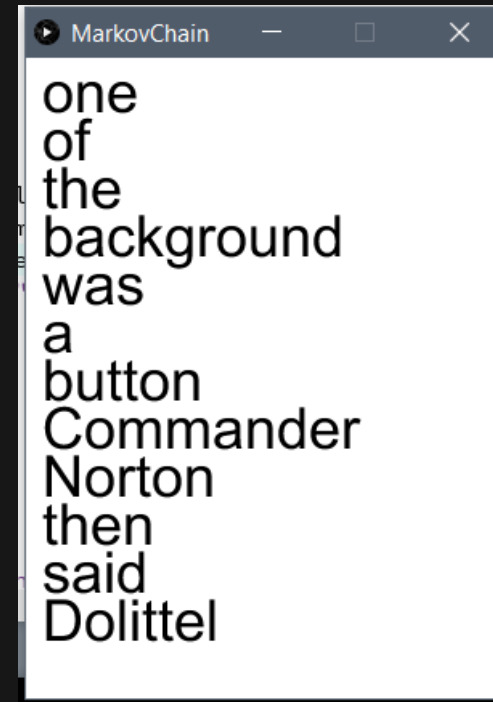
A screenshot of a window titled "MarkovChain" with standard Windows window controls (minimize, maximize, close). The window contains the following text:

the
position
That
would
do
all
personnel
than
a
console
I
would
take



A screenshot of a window titled "MarkovChain" with standard Windows window controls (minimize, maximize, close). The window contains the following text:

She
still
under
construction
personnel
and
look
good
Captain
Anthony
Picard
had
something



A screenshot of a window titled "MarkovChain" with standard Windows window controls (minimize, maximize, close). The window contains the following text:

one
of
the
background
was
a
button
Commander
Norton
then
said
Dolittel

How?

Das ist ein Hund.

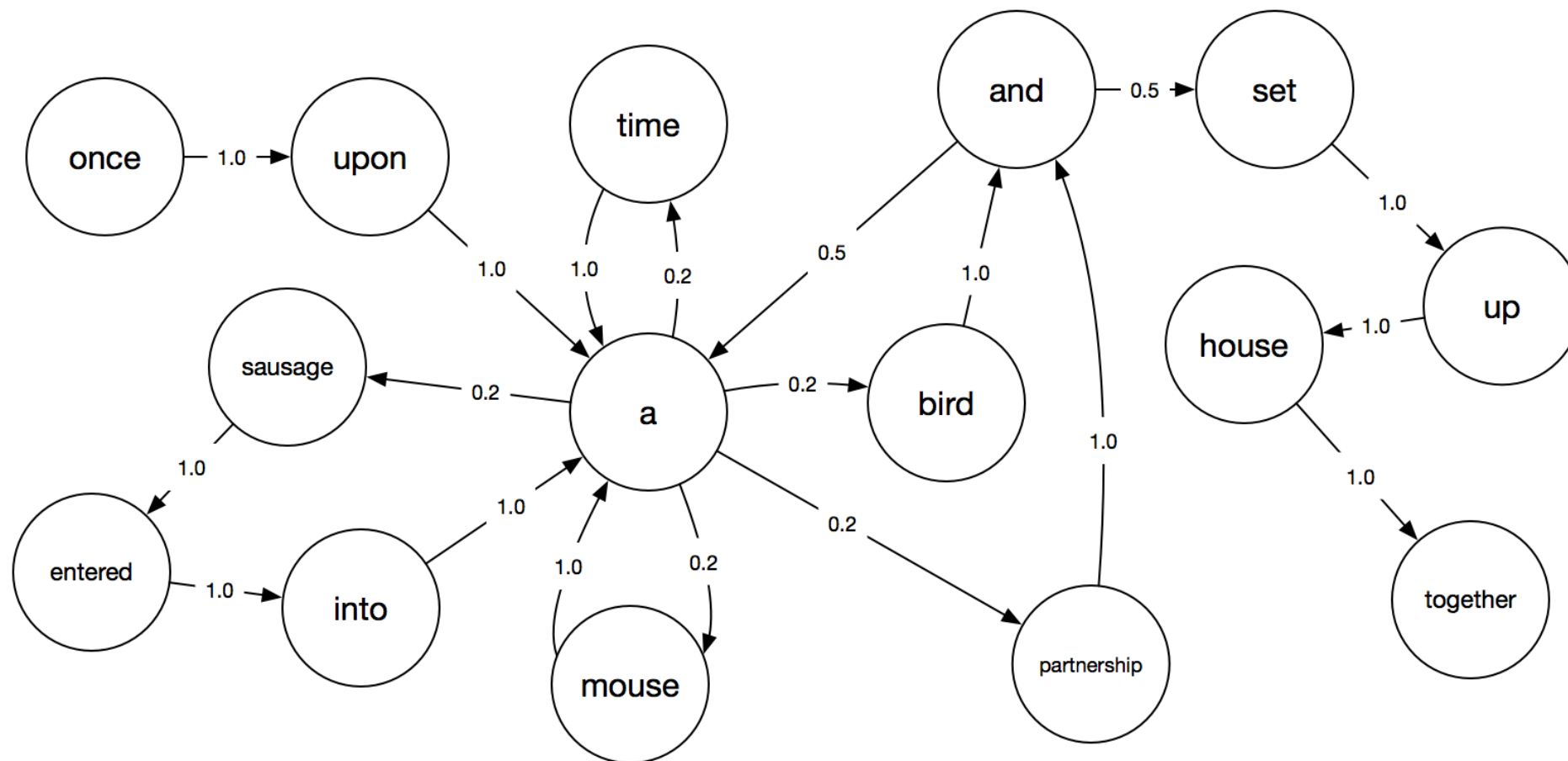
Das ist ein Haus.

Das kann nicht sein.

Das	ist	ein	Hund	.	Haus	kann	nicht	sein
ist	ein	Hund	.	Das	.	nicht	sein	.
ist	ein	Haus		Das				
kann								

[illegible]

How?



Tasks

1. Develop a Markov chain text generator and generate sentences based on the supplied shakespeare.txt
 - You most likely need to edit the file first (remove intro/outro)
 - You can use other .txt files
 - Save your generated text as images
 - <https://p5js.org/reference/#/p5/loadStrings>
 - Want to use another text-file? Discuss with me
2. Develop an algorithm which generates a wordcloud from shakespeare.txt or any other large files with text.

The wordcloud should show the most used n-words ($5 < n < 100$).

The words can overlap.

