

# CABbAGE

An AI Generated Pink Noise Approach to Improve Sleep

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## Abstract

The CABbAGE project aims to improve sleep though using a AI generated pink noise, variable frequency noise generated to promote better sleep. Given the novel research surrounding sleep and white/pink noise. As a type of pink noise, through personal findings the project aims to experiment with podcast-like noise and compare it sleep-performance of standard white and pink noise. To generate the audio, CABbAGE uses a range of generative techniques like LSTM and Markov Models trained on a variety of seed data ranging from Science and Tech, Zen and Nature and Sports.

## 1 Motivation

Sam likes noise while he sleeps so he likes idea.

## 2 AI Text Generation Approaches

We used Markov model and a LSTM approach for various auto generated noise.

### 2.1 Training Data

We soured our traning data from ...

### 2.2 Markov Model

The work and science behind this.

### 2.3 LSTM Apprach

The work and science behind this as well.

## 3 Use of Cognitive Technologies

We used IBM Watson technogeis that made it easy to convert text to speech and vise versa. This allowed us to traing the models easier by importing podcast audio into the model as plain text after watson tranformation process finished.

I'm baby air plant vexillologist brunch tacos tattooed meh ethical viral polaroid pinter-est 90's farm-to-table literally fashion axe bushwick. Yuccie lo-fi subway tile, actually ugh occupy 8-bit selvage unicorn jian-bing pabst cronut hell of lomo meh. Au-

thentic gochujang echo park iPhone four loko portland flannel heirloom irony. Twee single-origin coffee subway tile bitters synth disrupt adaptogen gochujang chicharrones air plant aesthetic hell of beard shoreditch health goth. Raclette woke gastropub, locavore tumblr bespoke tumeric.

Lo-fi aesthetic tumblr franzen. VHS whatever blog, chia hexagon tilde ramps synth succulents readymade waistcoat poutine vinyl la croix echo park. Aesthetic vegan echo park, blue bottle neutra succulents intelligentsia vinyl godard thundercats af try-hard green juice flannel. Locavore hell of biodiesel, tote bag bushwick fixie truffaut authentic venmo jianbing.

## 4 Application

The application was integral to providing a usable interface to the audio.

Something something. maybe write a bit about electron

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### 4.1 ElectronJS

Nodjes approach, easy to pick up and implement. Cross device whatever. can expand here.

## 5 Problems not Solved

add info about what we left out and corners we cut.

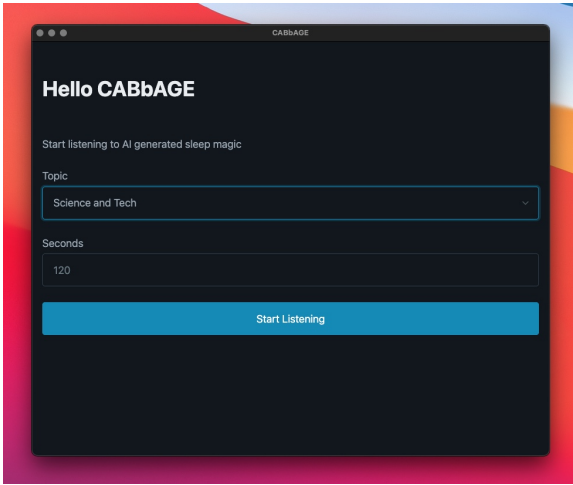


Figure 1: Image

## 6 Future Work

We would look to compare sleep performance of different models on different training data of the different types of noise.

## 7 References

1. something
2. something else
3. <https://www.webmd.com/sleep-disorders/pink-noise-sleep>