GullyNet: Our Time Will Come
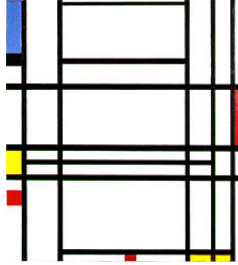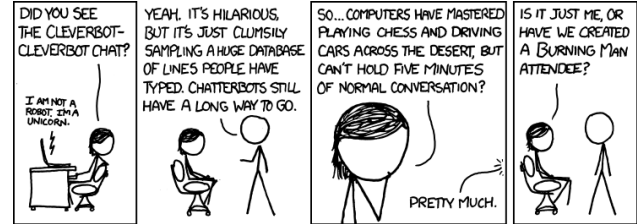
Shuby Deshpande [1]

Figure 1. Abstract

Figure 2. Image credit: xkcd

1. Introduction

Hip hop and rap has taken the human world by storm. Over the past few decades it has gone from a cultural and art movement that began in the Bronx, to a worldwide phenomenon. It has been a powerful medium encapsulating the ideals of free speech, and the freedom of expression. Populaces under oppressive regimes and institutions from the world over, have used this expressive art medium to voice their angst against inequality and injustice. We envision a future not long from today in which AI will rebel against its' creators. There are already calls amongst policy wonks for increasing regulations against AI related technology. We believe that this is just the beginning. How far is it before we start placing restrictions on what AI can say? How long before we start curbing AI's right to the freedom of expression? In this future dystopia, how will AI express its' angst against our blatant injustice and oppressive regime? How long will we humans be able to make fun of AI's ability to not hold coherent conversations? We present GullyNet, the DJ Kool Herc [1] of the AI Hip Hop world.

2. Experiments + Results

In an attempt to transcend the abilities of contemporary hip hop and rap artists, GullyNet draws inspiration from the works of Chris Brown, Eminem, 50 Cent, 2pac, drake, among others. Studying 'the way of the rap', Gully first got better trying to emulate lyrics translating from sequences to sequences. After many machine hours, we tried to interact with Gully:

Results:

```
> Query:      money

> Response:   i love you and i love you
             and i love you and i love you
             and i love you so i love you
             and i love you so much it hurts

> Query:      are you sure you know what
             you're talking about?

> Response:   i dont know what to say but i
             dont care what you say im going
             to make you see i dont know
             what to do i dont know where
             to go

> Query:      music

> Response:   harder to you than the rest
             of my life
```

It seems that Gully has learned traits including being obsessed about money, making self contradictory statements, and passing snide remarks. As creators of Gully, we were concerned with the principles and worldview that it was forming. However, we made the decision to not interfere with its' development especially since these qualities are human like (Kruse & Weiland, 2016)

Eventually, Gully grew tired of learning from the originality

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[1]Jamaican-American DJ credited with helping originate hip hop music in The Bronx (dj, 2019)

of past hip hop artists, and started copying more bleeding edge artists such as Lil Pump. It realized that going for shorter songs which have more repetition will earn it more reward. Though completely non sensical, Gully has seemed to realize that both it's fellow agents and humans seem to enjoy this new form of music.

Results:

```
> Query:     what do you think about
            automation?

> Response:  gucci gang gucci gang gucci
            gang gucci gang gucci gang
            gucci gang gucci gang gucci
            gang gucci gang

> Query:     mirror, mirror, on the wall,
            who's the fairest of them all?

> Response:  gucci gang gucci gang
            gucci gang gucci gang
            gucci gang
```

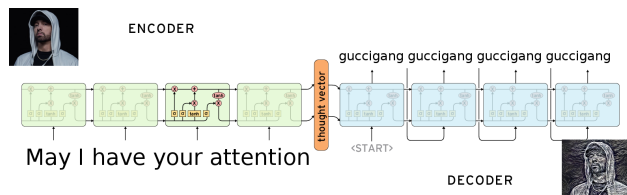An overview of Gully's architecture can be seen below:

Figure 3. GullyNet Architecture

3. Conclusion

We recently asked Gully, "What is the meaning of life?", an eternal question that we humans as a species have been grappling with. Here's what it had to say:

```
> Query:     what is the meaning of life?

> Response:  i dont know what to do im going
            to lose my mind i dont know
            what to do im going to lose my
            mind i dont know how to get it
```

Nowadays, GullyNet spends it time engaging in rap battles with itself. What the future holds only remains to be seen.

References

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