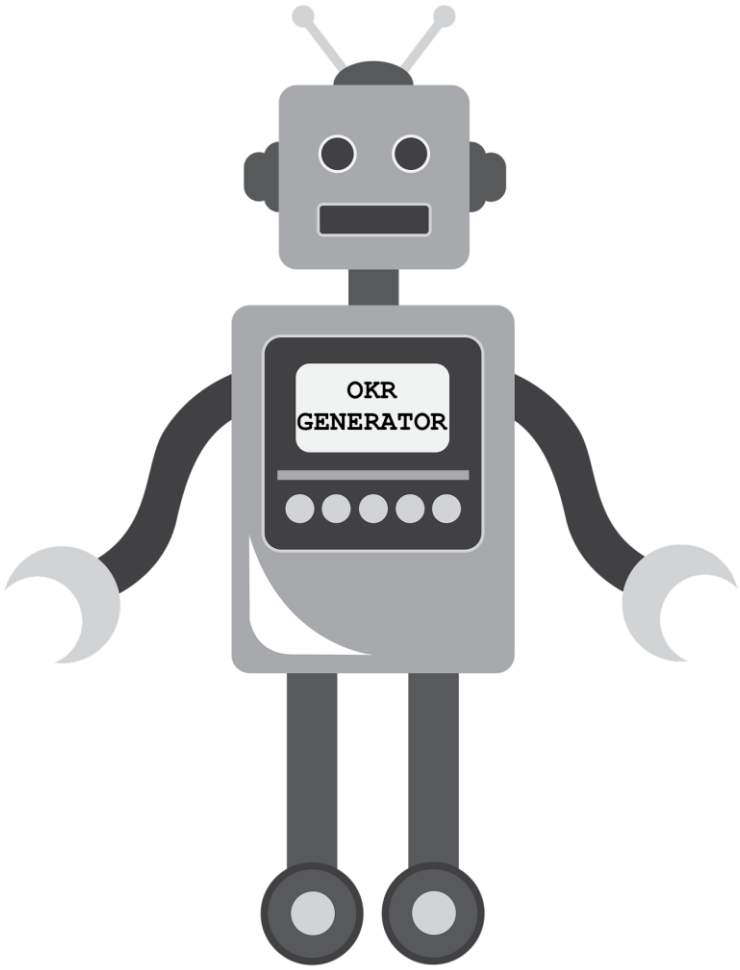


MAKING AN OKR GENERATOR: A MOFO FLEX STORY

BY ABBY, CADE, MAVIS, PAUL, SAM & YOURI

In the year 2019, the Mozilla Foundation set out to learn about the challenges, opportunities, and questions of artificial intelligence (A.I.) together.

They called the experiment:
MoFo Freeform Learning and eXploration (FLEX)

This is the story of one group's FLEX journey…

I knew I wanted to try out text generating. One day, in my team call, I asked *what's a pithy MoFo thing we use all the time? Can we generate one?*

At first I was like, a POP generator? And then it hit us: OKR GENERATOR!

ABBY
Project Lead

I proposed it as a FLEX project right away.

The group grew, and we all had different reasons for joining.

I'm hoping to become familiar with the tools available to developers building machine learning solutions.

How can we engage developers about ethical implementations?

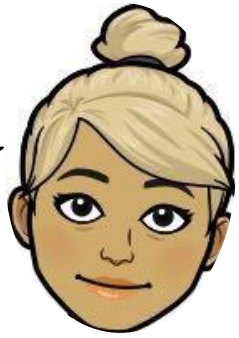
CADE

PAUL

I'm interested in ways to make the OKR development process easier for our MoFo colleagues.

Can we build something that shows the alignment between KRs and top-level Objectives?

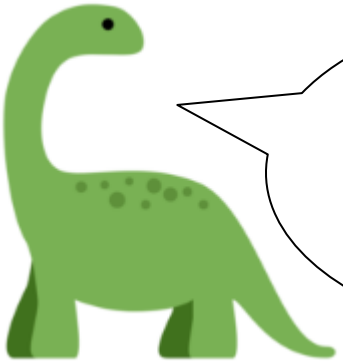
I want to learn more about AI and how it works...also more about neural networks would be cool too :)



YOURI

I haven't done much with neural networks & would love to get a better idea of how they work. I learn best by doing.

ABBY



SAM

I want to better understand (aka understand at all!) the technical side of AI (versus the theoretical side)

Making a thing with you all sounded like a really fun & effective way to do that.

I joined this project midway. I don't know much about AI. This project looks like a good starting point for me to learn about how AI works.

MAVIS

We decided to test training an algorithm with data from the Internet Health Report, then sample OKRs.

First, we needed to gather training data…

samb 2:20 PM
The 2019 IHR is in plaintext! Hopefully it works for the demo... 🙂
IHR 2019 plaintext.txt

```
1  INTRODUCTION/README
2
3  Is the internet unhealthy? We planted this question in your mind with the title of this report
   and in the questions we ask throughout. But you will not be getting a simple yes or no answer.
4
5  As you may have gathered, this publication is neither a country-level index nor a doomsday
   clock. We invite you to join us in assessing what it means for the internet to be healthy, and
   to participate in setting an agenda for how we can work together to create an internet that
   truly puts people first.
```

paulz ❌ 3:33 PM
@cade I just compiled a quick list of sample objectives. Please let me know if more/different examples would be useful. Thanks! https://docs.google.com/spreadsheets/d/1EeGRBLguQ100kemZV2LlLj-gdLywYaz7nBl9tOgZuio/edit?usp=sharing
👍 2

… and learn how to train an algorithm!

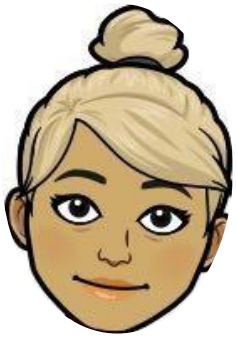
I ran a classification tutorial on Keras (recording, tutorial)

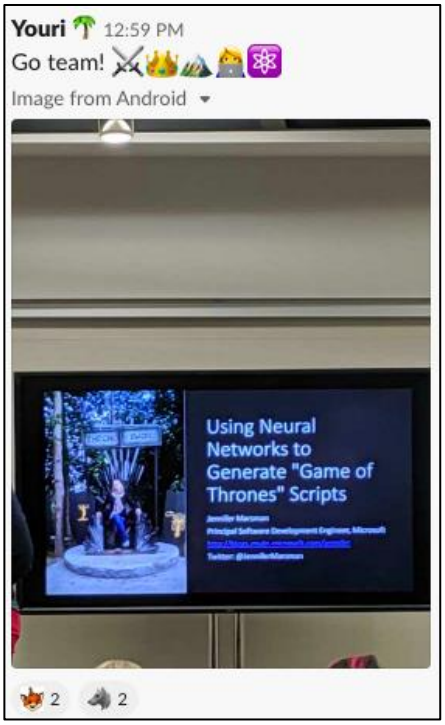
I followed a tutorial, and used the IHR instead of Alice in Wonderland.

I took an online workshop (Step by Step to Machine Learning) and went through a few online tutorials.

I have to admit I still can't wrap my head around Keras and neural networks.

I went to the Collision Conference and was able to attend an awesome workshop about Neural Networks!





Taking what we learned, we trained a neural network to write the next Internet Health Report! Or, we tried to.

It didn't know how to spell! We trained it by character.

Here's a quick explainer on a neural network.

After 1 hr of training our neural network gave us this:

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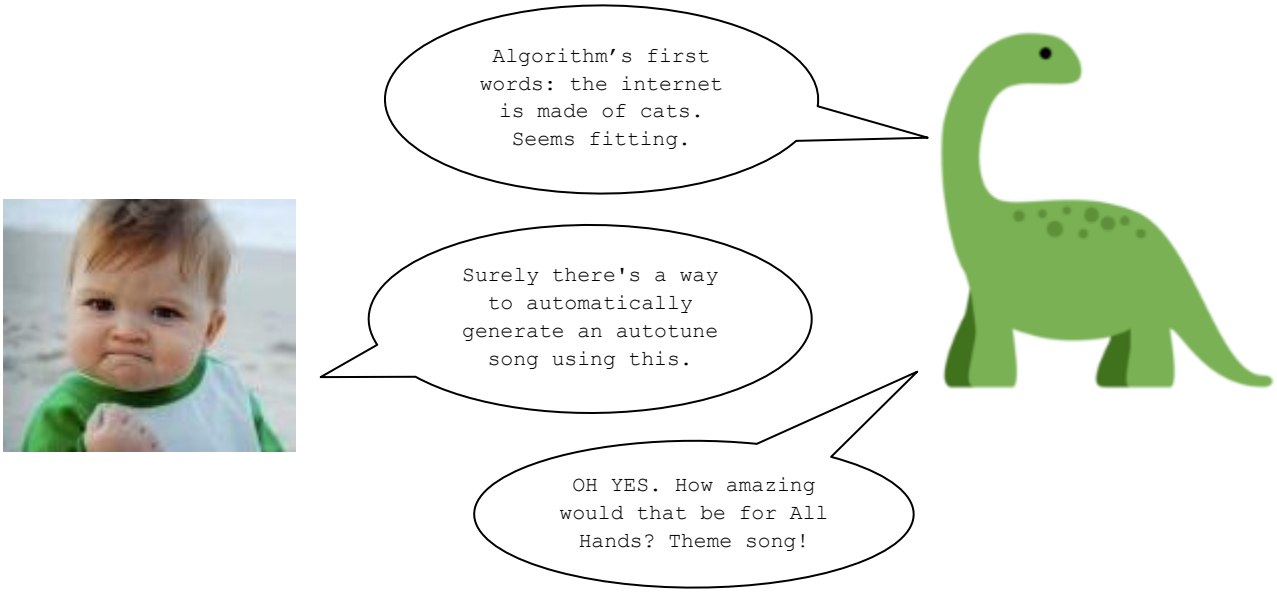

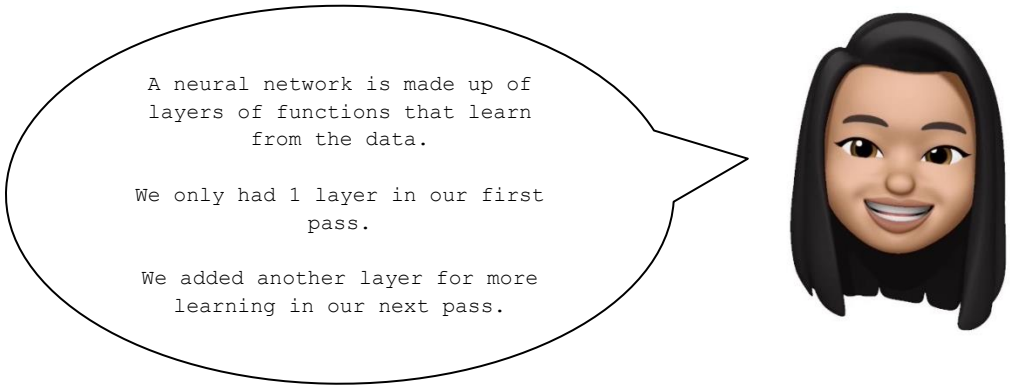

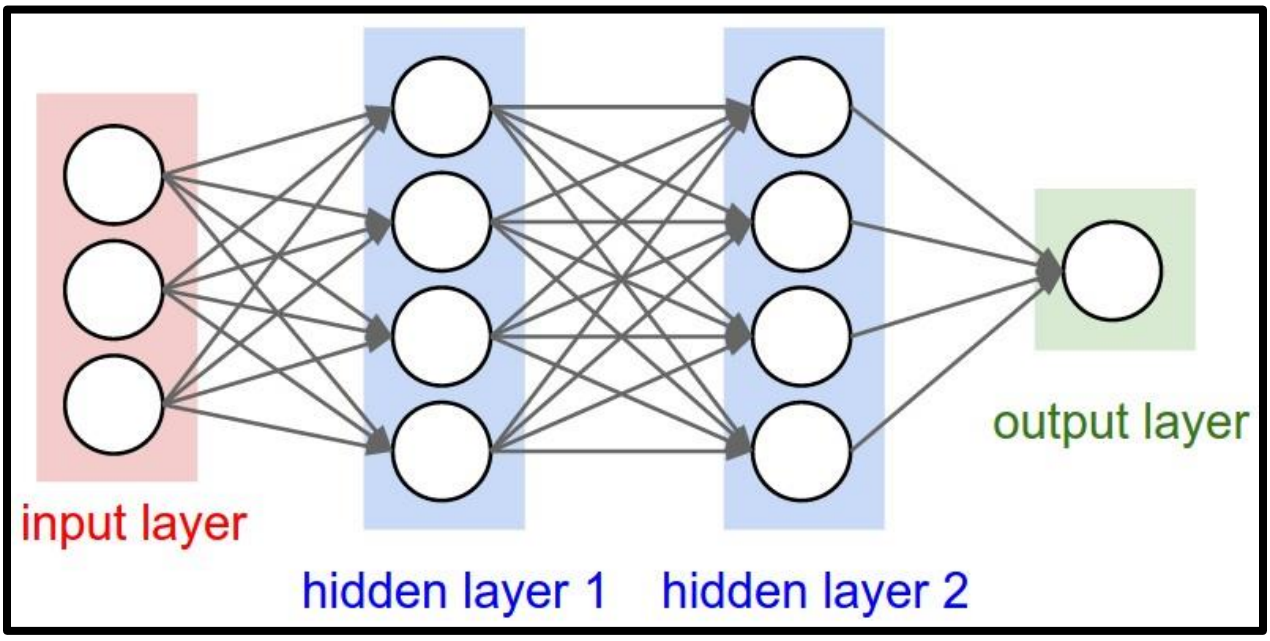

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After we added a second layer, our neural network gave us this:

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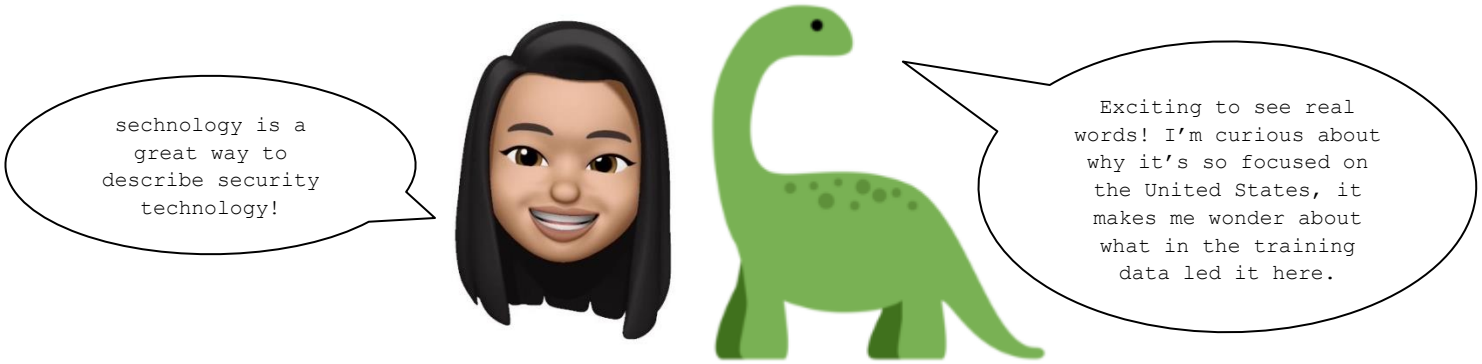


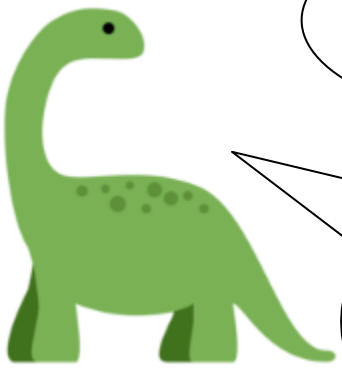
After 2 days and another layer, we got:

technology in the united states and security and security and security

We never quite got to training an algorithm to make OKRs for us.

¯_(ツ)_/¯

But, we did discover ideas we want to follow further!



One idea I have: the current neural net learns by characters - would we get there faster if we used words instead?

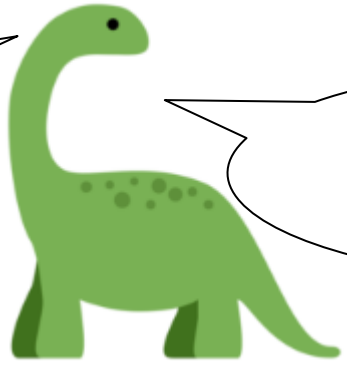
I'm still curious about the technical side of things, so my challenge to myself is to go through the tutorial and see if I can create a neural net for my own… before the end of this year? 😅

Jlin ordered a GPU after being inspired by the MoFo plenary. It's a piece of hardware that's very fast at training neural networks.

Theoretically we could do the 2 day training in a hr?!

And we learned a lot, too.

This algorithm isn't becoming Skynet anytime soon!



But seriously, I was surprised that it's both pretty accessible to learn how to build a neural net, but also really challenging to get it to generate something high-quality.

I assumed we'd need far more data and processing power to generate anything, so I'm impressed how we got something in English with relatively little data and a bit of time on my slow laptop!

IF YOU WANT TO TRY MAKING YOUR OWN, YOU CAN FIND THE SCRIPT HERE:
https://github.com/acabunoc/okrgenerator

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