



Materiale didattico per partecipante al corso **"TECNICO ESPERTO NELL'ANALISI E NELLA VISUALIZZAZIONE DEI DATI"** – Rif.P.A. 2021-15998/RER – approvata con DGR n. 1263 del 02/08/2021 di IFOA – Istituto Formazione Operatori Aziendali

Albert Einstein: Insanity Is Doing  
the Same Thing Over and Over Again  
and Expecting Different Results

Machine learning:



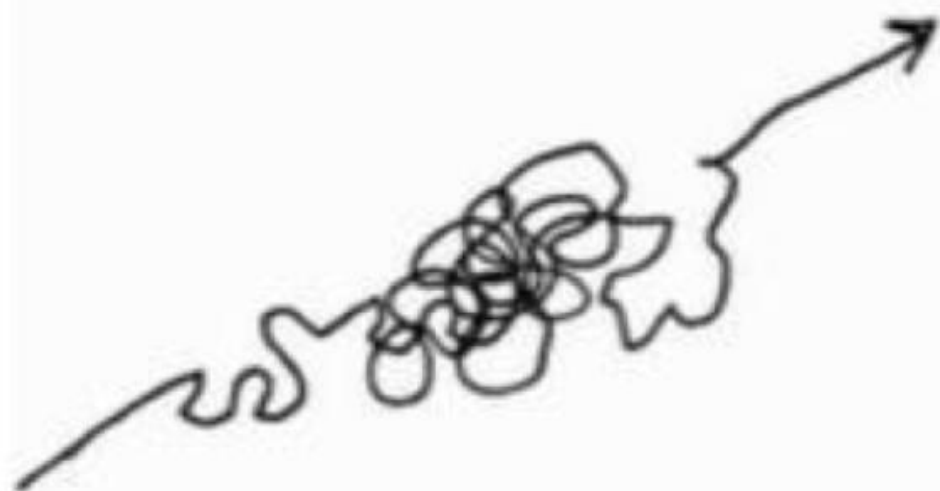
**IF IT IS CALLED "MACHINE LEARNING"  
THE MACHINE SHOULD LEARN IT**

**NOT YOU**



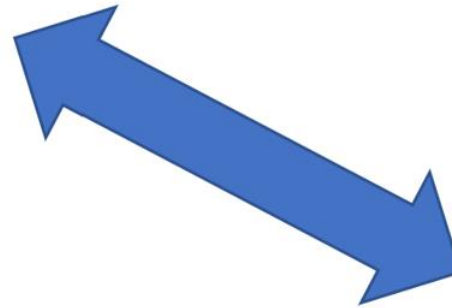
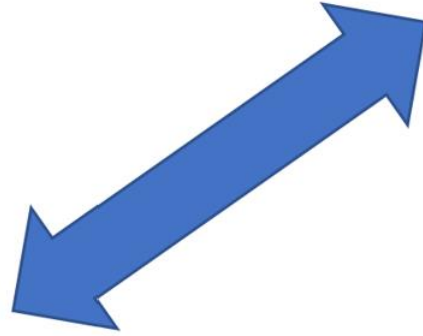


what people think  
it looks like



what it really  
looks like

AI



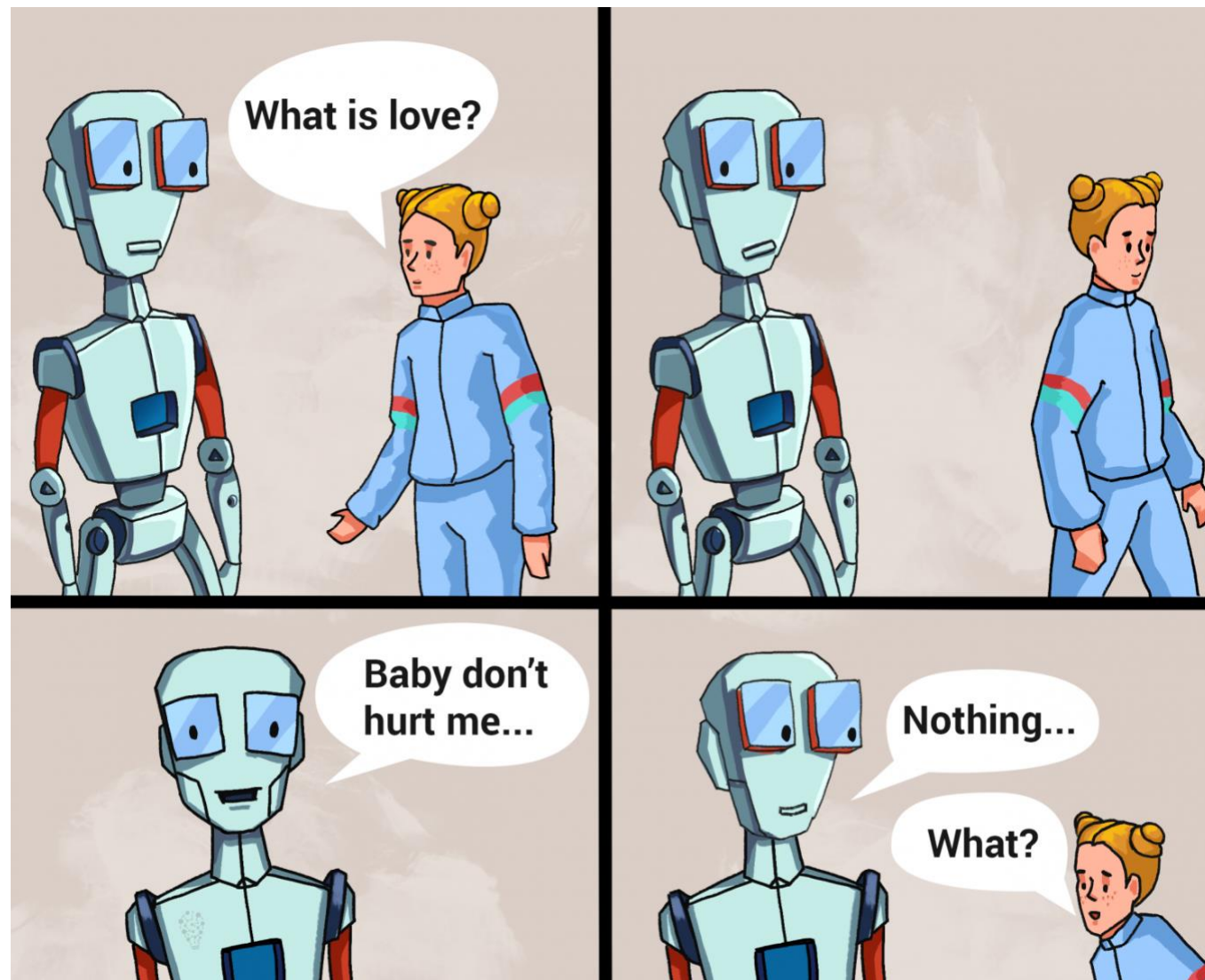
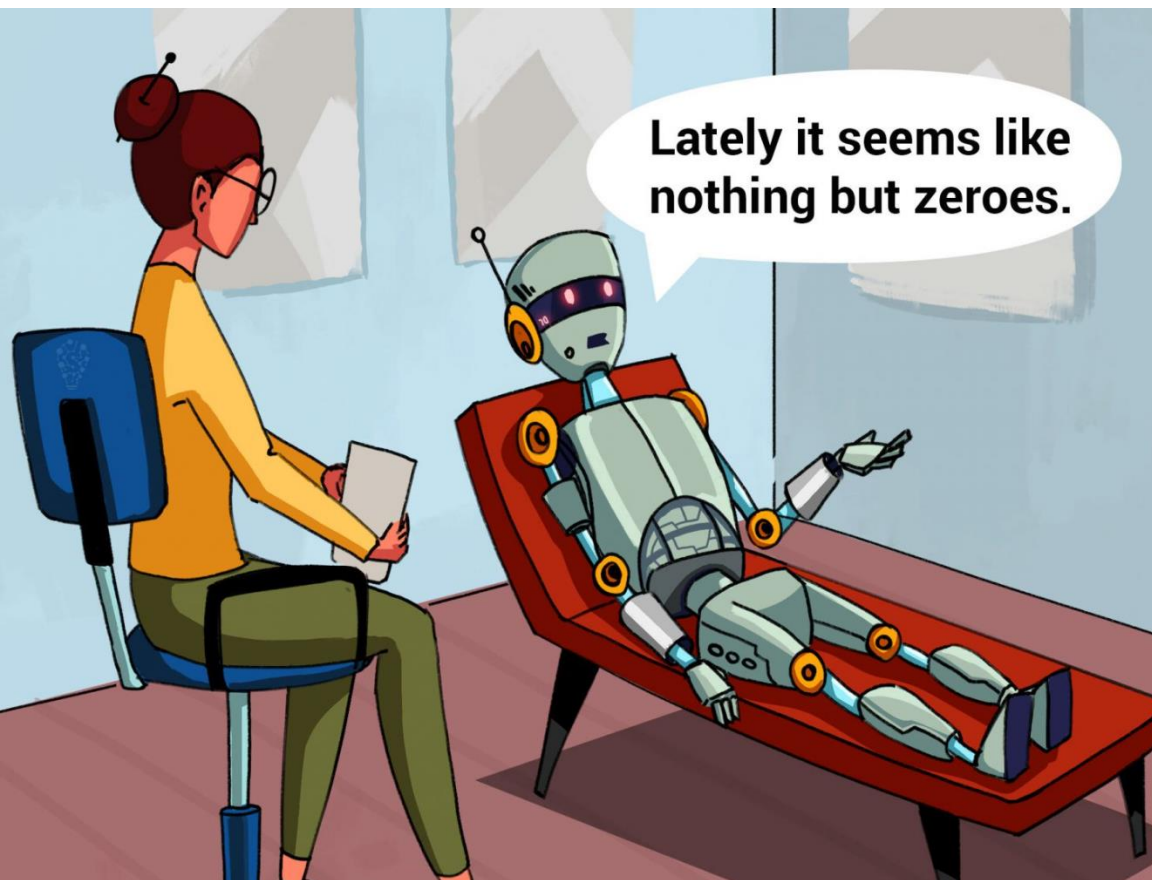
+



STILL  
=







**EVERY JOURNEY STARTS**



**WITH THE FIRST STEP!**

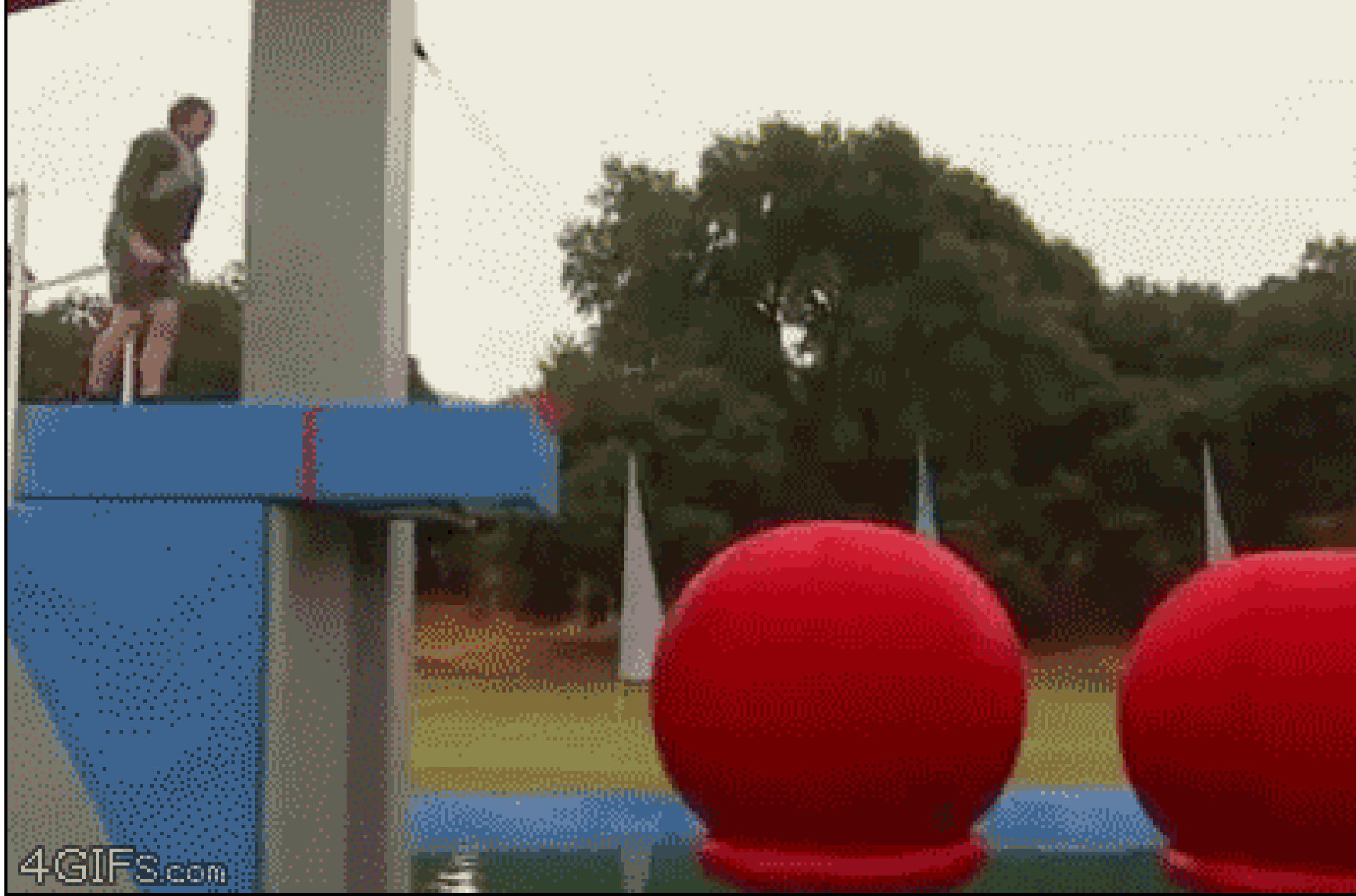


**I HAVE NO IDEA**



**WHAT I'M DOING**





**CVS**



**SVN**



**BITKEEPER**



**GIT**



**git add .**



**git commit**



**git push**

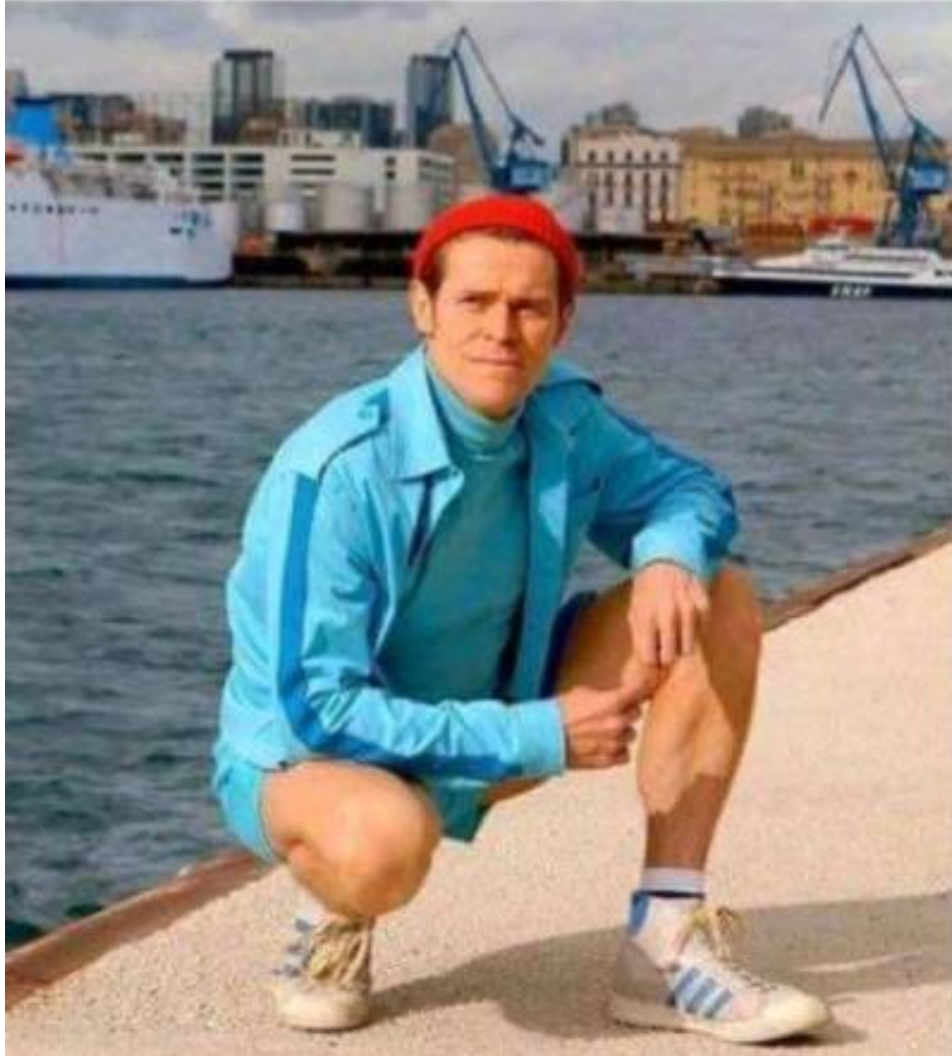


Wow, a different  
error message...  
Finally some  
progress!

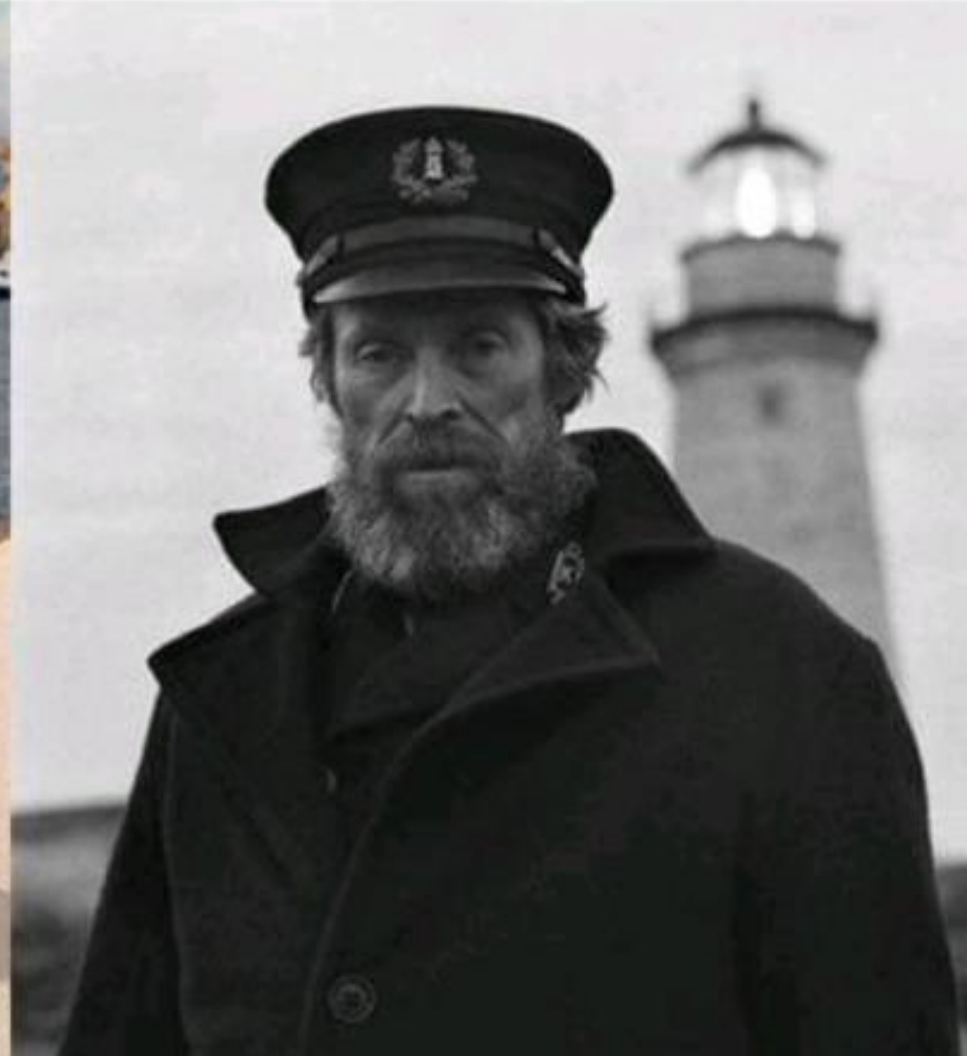




**When I started  
cleaning data**



**When I finished  
cleaning data**



**CORRELAZIONE**



**CAUSALITA'**

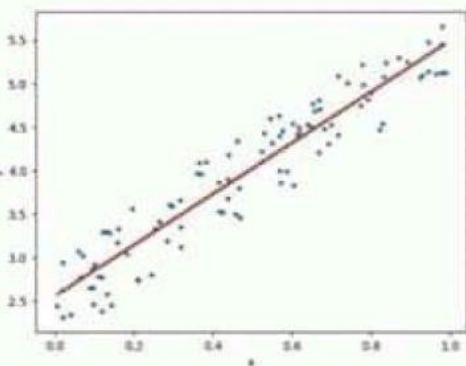




**Show me a strong  
relationship**



**I said a strong**



**Perfection**



**Stop using linear regression**



**You know what? I'm gonna start  
using linear regression even harder**



**OH, DECISION TREES ISN'T  
GOOD ENOUGH FOR YOU**

**TELL ME MORE ABOUT  
RANDOM FOREST**

**LIFE IS JUST A**

**RANDOM FOREST**

[memegenerator.net](http://memegenerator.net)



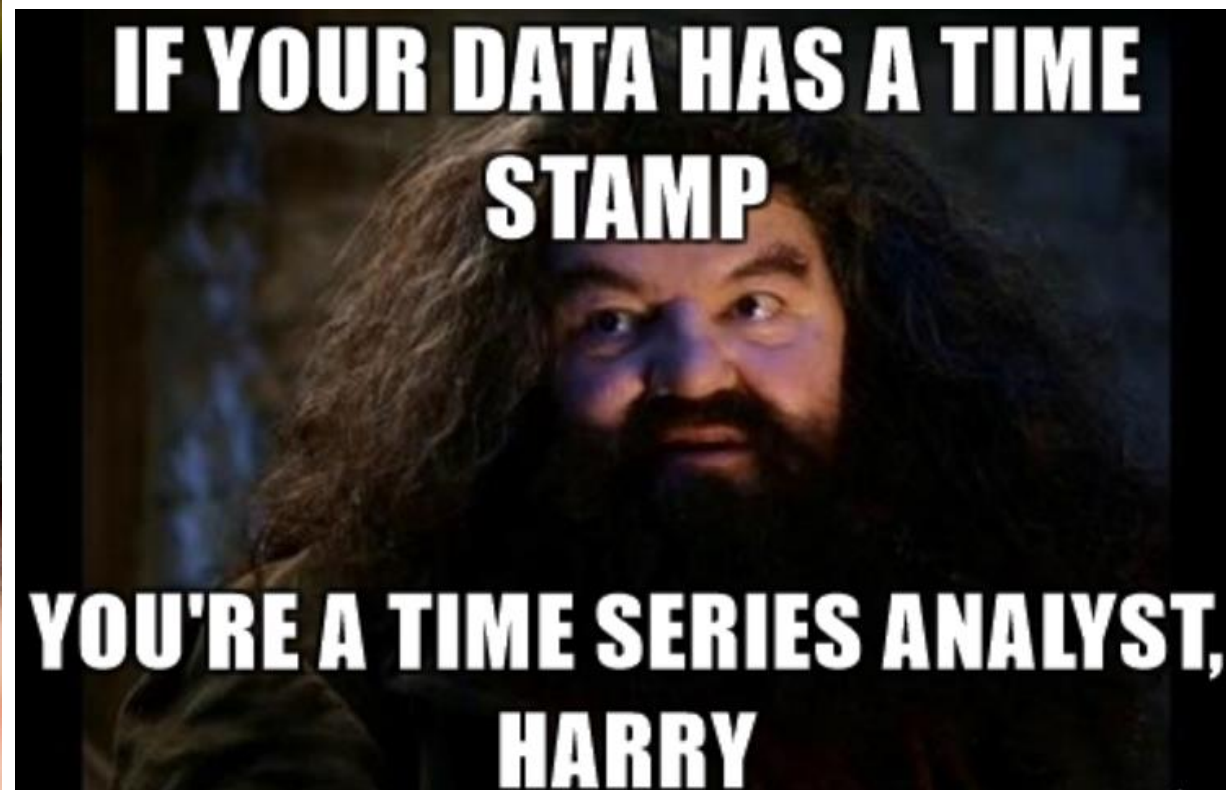
So what's your idea of a perfect date?

IG: @PunHubOnline



DD/MM/YYYY  
I find other formats  
a bit confusing.

Pun  
hub



IF YOUR DATA HAS A TIME  
STAMP

YOU'RE A TIME SERIES ANALYST,  
HARRY



IT DOESN'T MATTER HOW MANY  
RESOURCES YOU HAVE.



IF YOU DON'T KNOW HOW TO USE  
THEM, IT WILL NEVER BE ENOUGH.



artists:



ai art will  
replace us



nooooooooooooo

programmers:

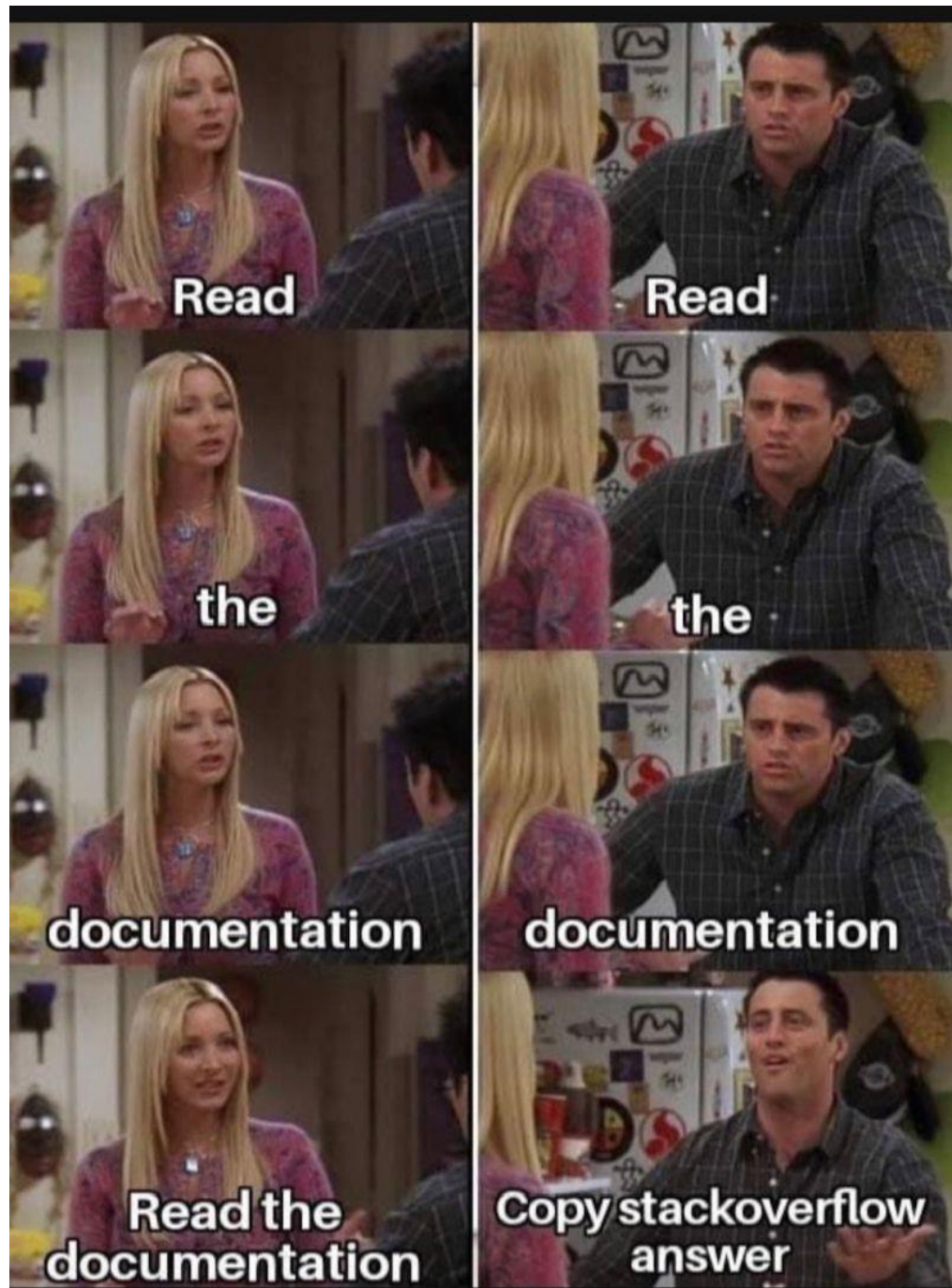


ChatGPT will  
replace us



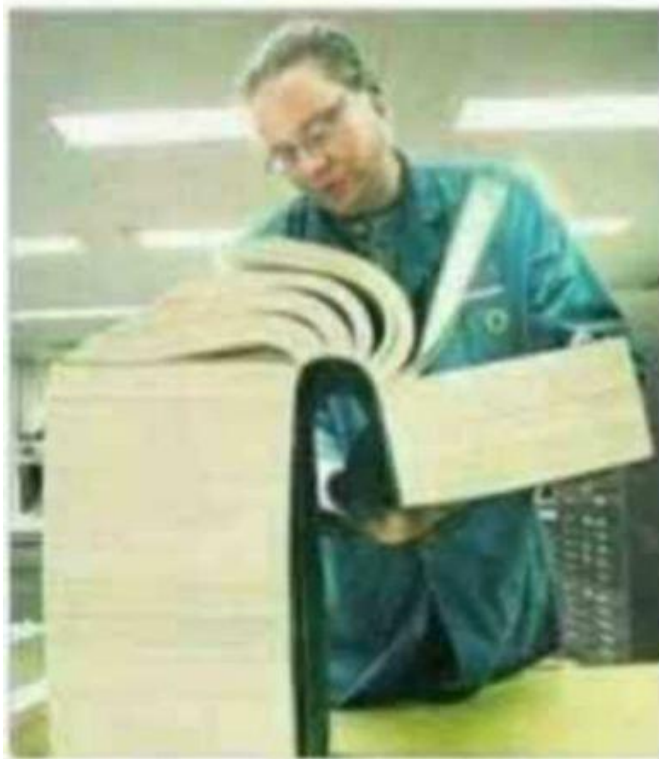
finally.





my code solving a  
specific problem

code found on  
stackoverflow solving  
the same problem





# Four stages of learning Data Science



@Python.Learning





A close-up photograph of a young boy with light brown hair, looking upwards with a wide-eyed, open-mouthed expression of shock or awe. He is lying in bed, with a white pillow and a purple knitted blanket visible in the background.

**I SEE PATTERNS**

**THEY'RE EVERYWHERE**



**I had a problem so I used regular  
expressions**

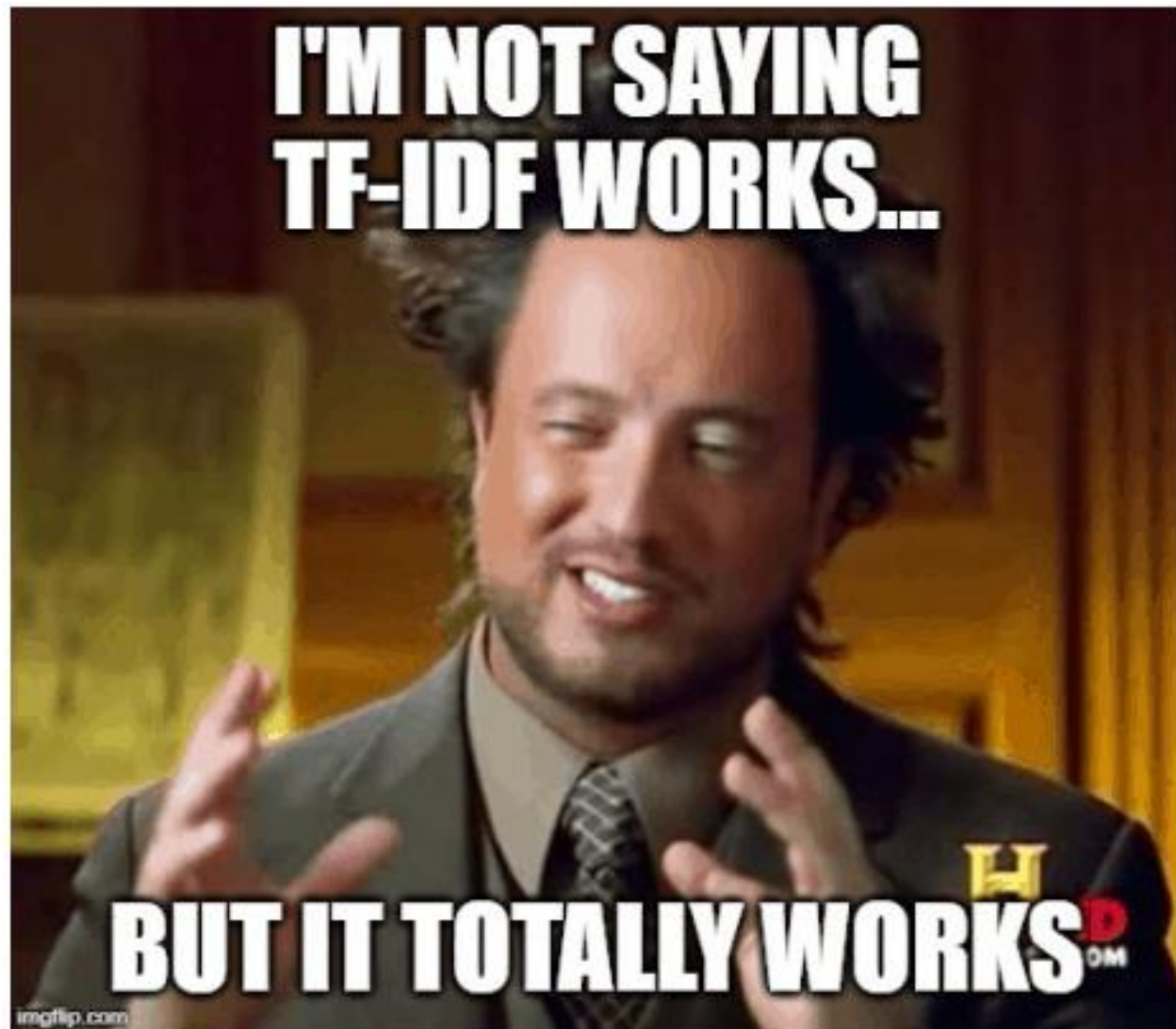
**Now I have two  
problems!**

**Don't LIE to me**



**NLP**

**I'M NOT SAYING  
TF-IDF WORKS...**

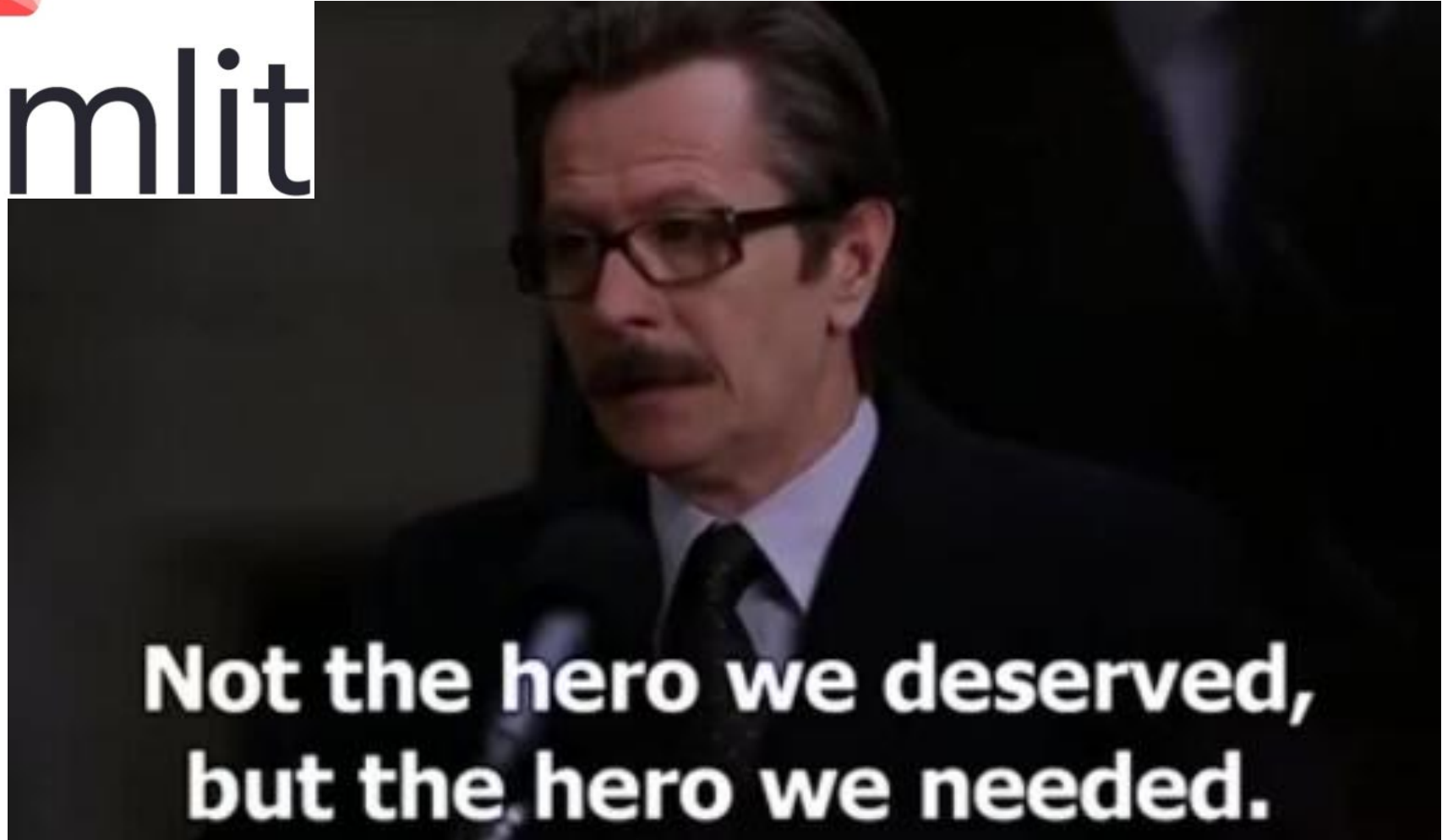


**BUT IT TOTALLY WORKS**

imgflip.com



# Streamlit







WE DID IT!

## THE FASTEST THINGS ON EARTH



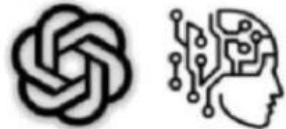
Cheetah



Airplane



Speed Of Light



Experts in AI

**AI SPECIALIST**

**EVERYWHERE...**

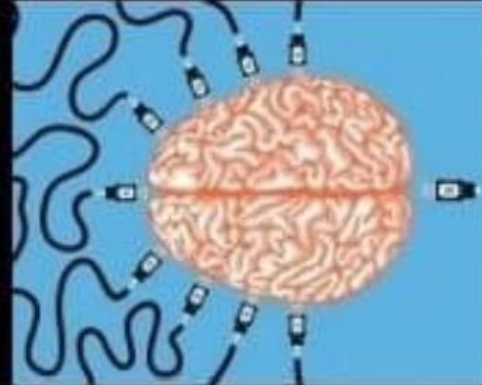


# POINT OF VIEW MAP

## Machine Learning



What society thinks I do.



What my friends think I do.



What computer scientists think I do.



What my boss thinks I do.



What I think I do.

```
IMPORT PANDAS AS NP  
IMPORT METPLUTLAB AS PTL  
PD.READ_CSV('BAU.XLSX')
```

What I really do.



**REAL TIME  
EXPERIENCE**

**DATASCIENCE  
CERTIFICATION**





A black and white photograph of a person sitting on a cowhide rug. The person is wearing jeans and has their feet tucked up towards their chest. They are holding a rectangular sign that has the text "Got Skills, Need Cash!" written on it in a cursive script. The sign is propped up against the person's legs. The background is a rough, rocky ground.

*Got Skills,  
Need Cash!*



A close-up shot of a man with a beard and sunglasses, holding a handgun. The text "I GOT YOUR ANSWER" is overlaid in large, white, bold, sans-serif capital letters with a black outline. The background is blurred, showing what appears to be an indoor setting with warm lighting.

**I GOT YOUR ANSWER**

**RIGHT HERE**





**GETTING READY  
FOR WORK LIKE...**







-Great, and do you have experience?  
-Yes, this is my 20th interview.







**ME?  
SARCASTIC?  
NEVER.**



Sarcasm is an art.  
If it was a science,  
I'd have my PhD.

MY LEVEL OF [REDACTED]  
**SARCASM** [REDACTED]  
HAS GOTTEN TO THE [REDACTED]  
POINT WHERE [REDACTED]  
I DON'T EVEN KNOW [REDACTED]  
IF I'M KIDDING OR NOT





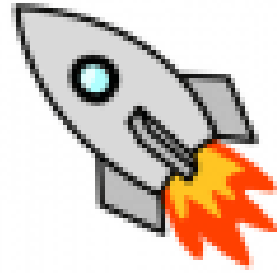
**THANK YOU BERRY MUCH!**





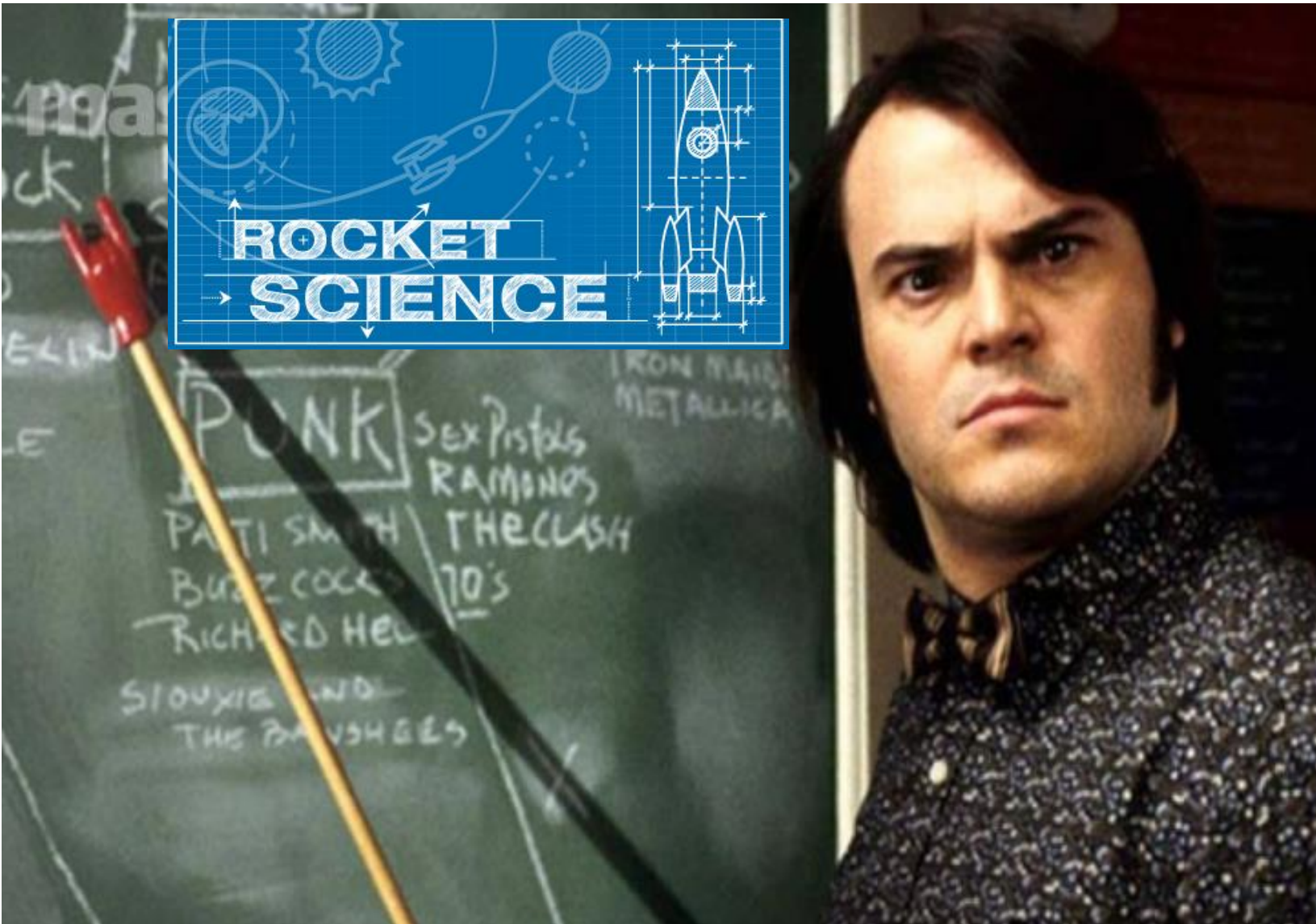
*"That's all Folks!"*





**KEEP  
CALM  
IT'S NOT  
ROCKET  
SCIENCE**

MEANWHILE IN THE WORLD....



**KEEP  
CALM  
IT'S NOT  
DATA  
SCIENCE**