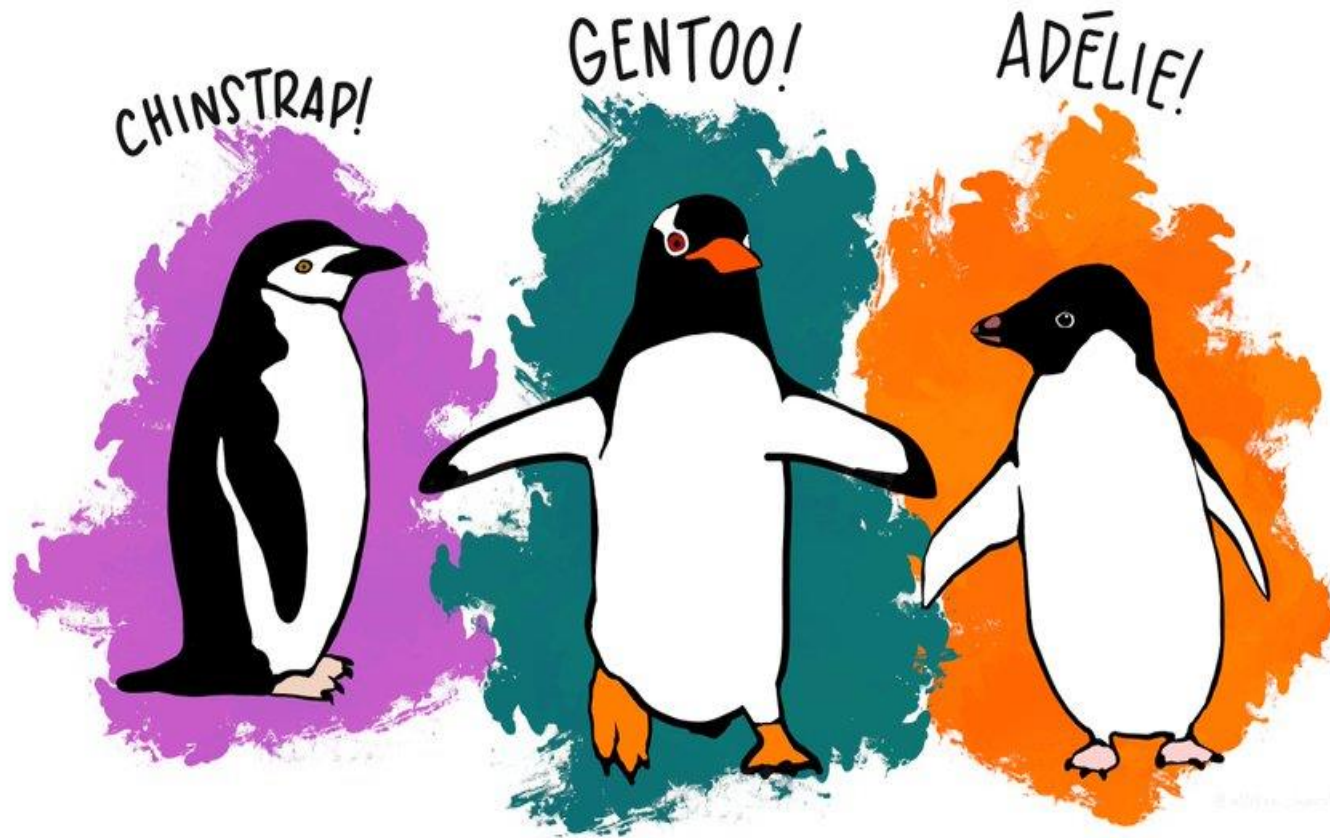


Integrating visual communication and storytelling in Software Engineering without being a pixel-pusher



Vaishnavi V

Penguin Dataset



Goal

Determine the species of a penguin

Parameters :

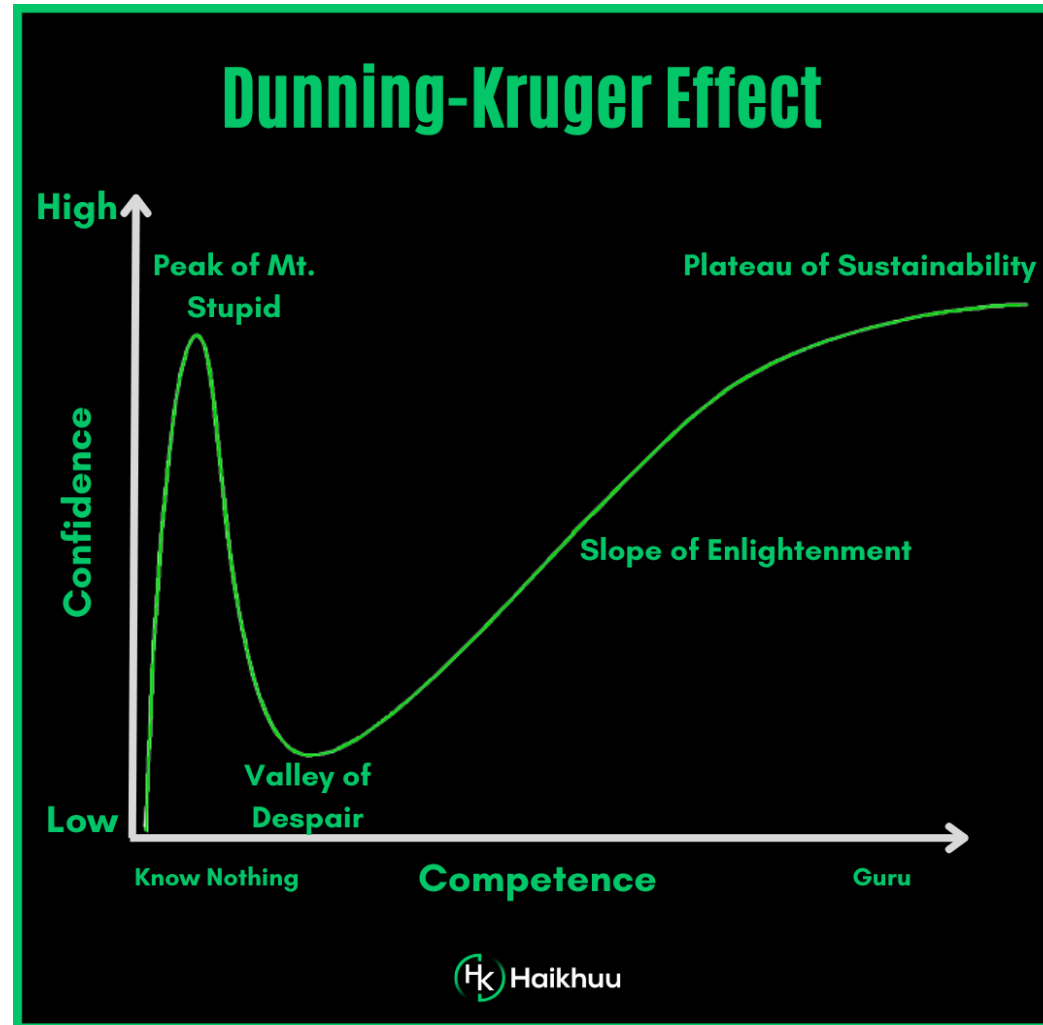
- Culmen length
- Culmen depth
- Flipper length
- Body mass



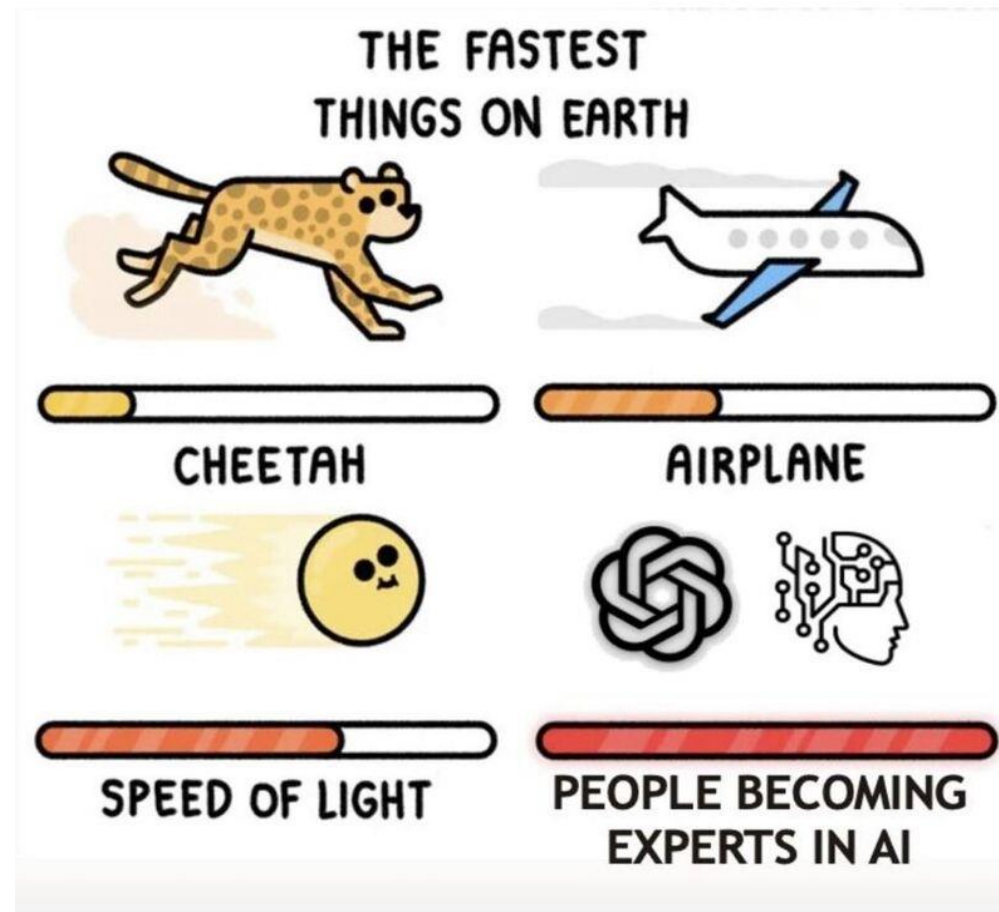
Disclaimer



Dunning-Kruger effect



Not an expert!



Definition

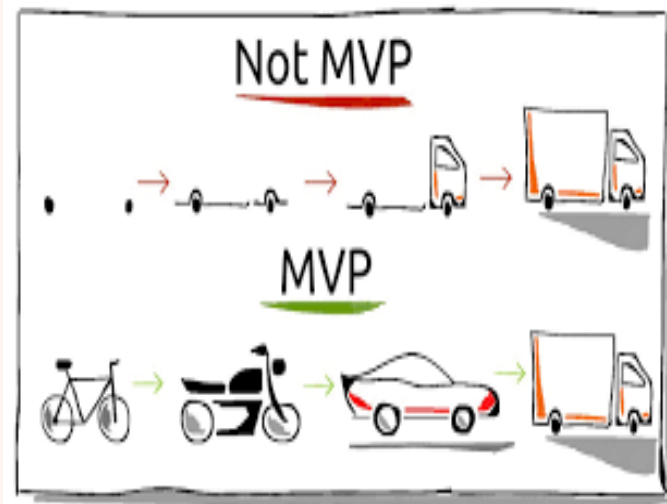


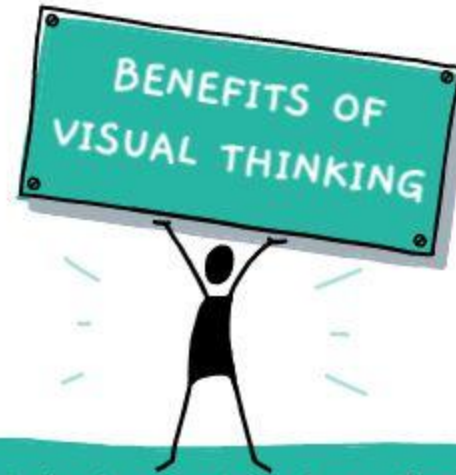
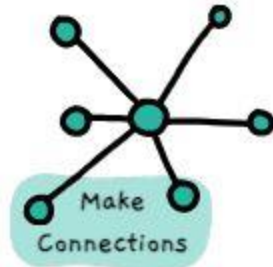
Visual communication is the practice of using visual elements to get a message across, inspire change, or evoke an emotion.



Perfect MVP

- Communication design refers to crafting a message that educates, motivates, and engages the viewer.
- Graphic design uses design principles to communicate that message in a way that is clear and eye-catching to the intended audience.





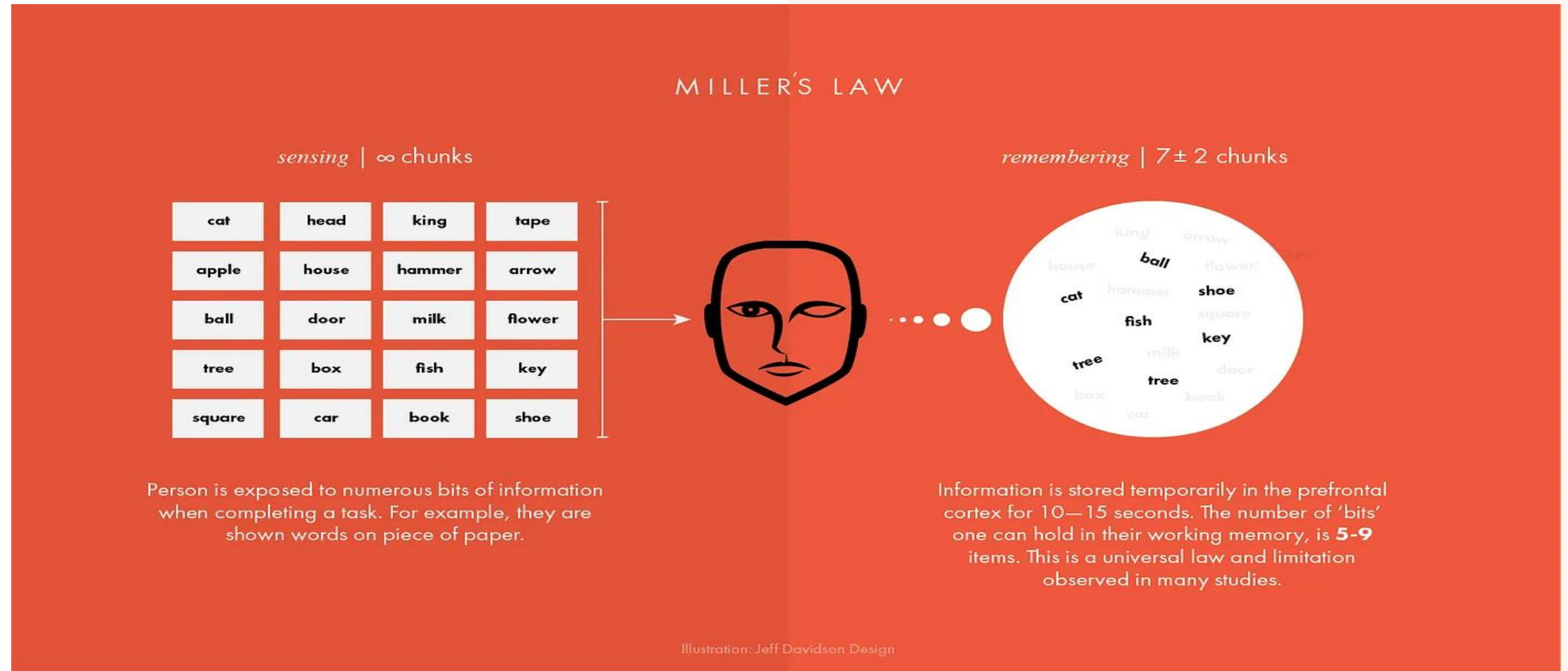
Visual thinking externalizes thinking so you and others can "see what you mean." This allows you to:



Working Memory – Information Processing



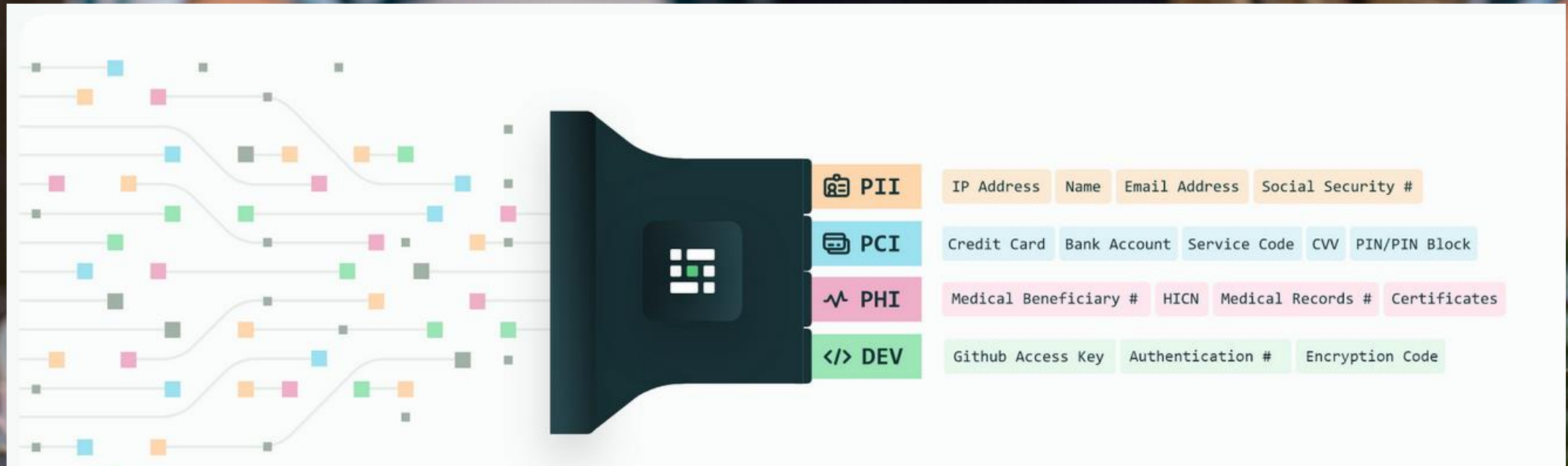
George Miller's Magical Number of Immediate Memory



A close-up photograph of a person's hands holding a succulent plant. The person is wearing a blue and white checkered shirt. The succulent has thick, fleshy, light blue-green leaves. The background is blurred, showing more of the same plant and the person's arm. A semi-transparent orange rectangular box is overlaid on the right side of the image, containing the word "Examples" in a dark serif font.

Examples

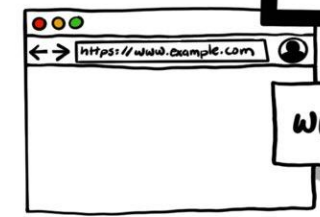
Privacy



Source : Medium blog

WHAT HAPPENS* WHEN YOU TYPE IN A URL IN AN ADDRESS BAR IN A BROWSER?

*a brief overview

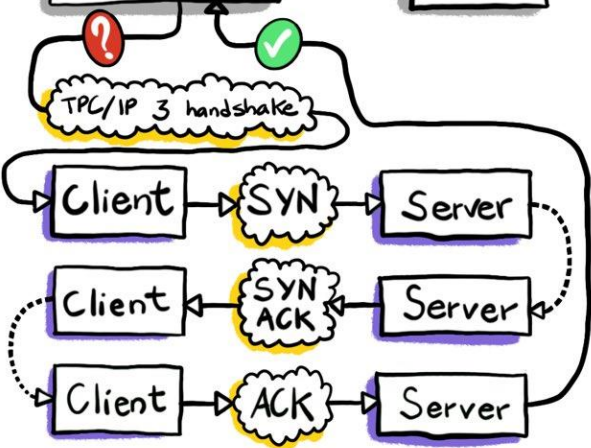
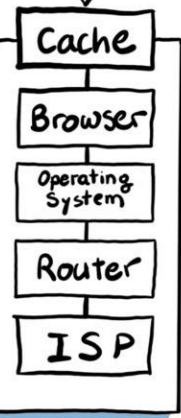


www.example.com

DNS

initiate TCP Connection

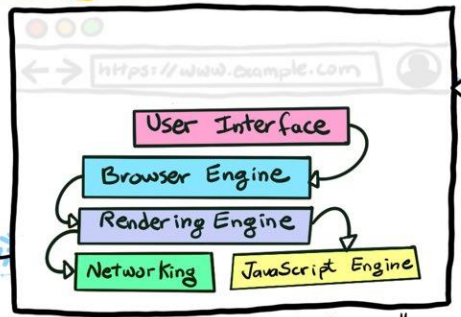
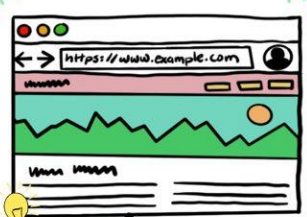
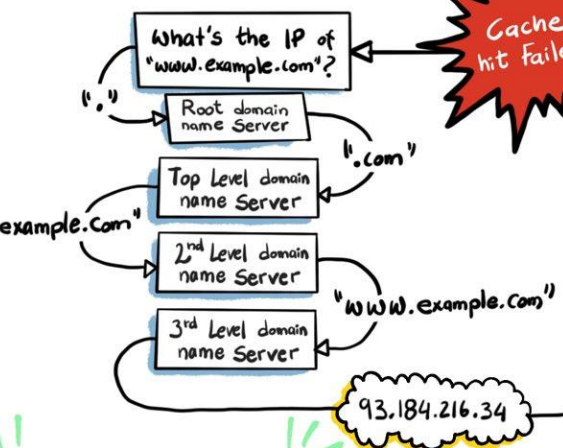
HTTP Request



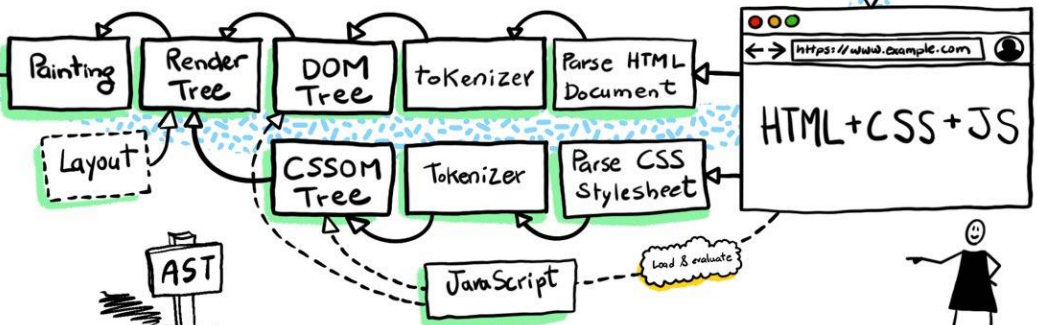
GET http://example.com HTTP/1.1

Server Response

- 1xx informational message
- 2xx success
- 3xx redirects
- 4xx client errors
- 5xx server errors



"inside the browser"



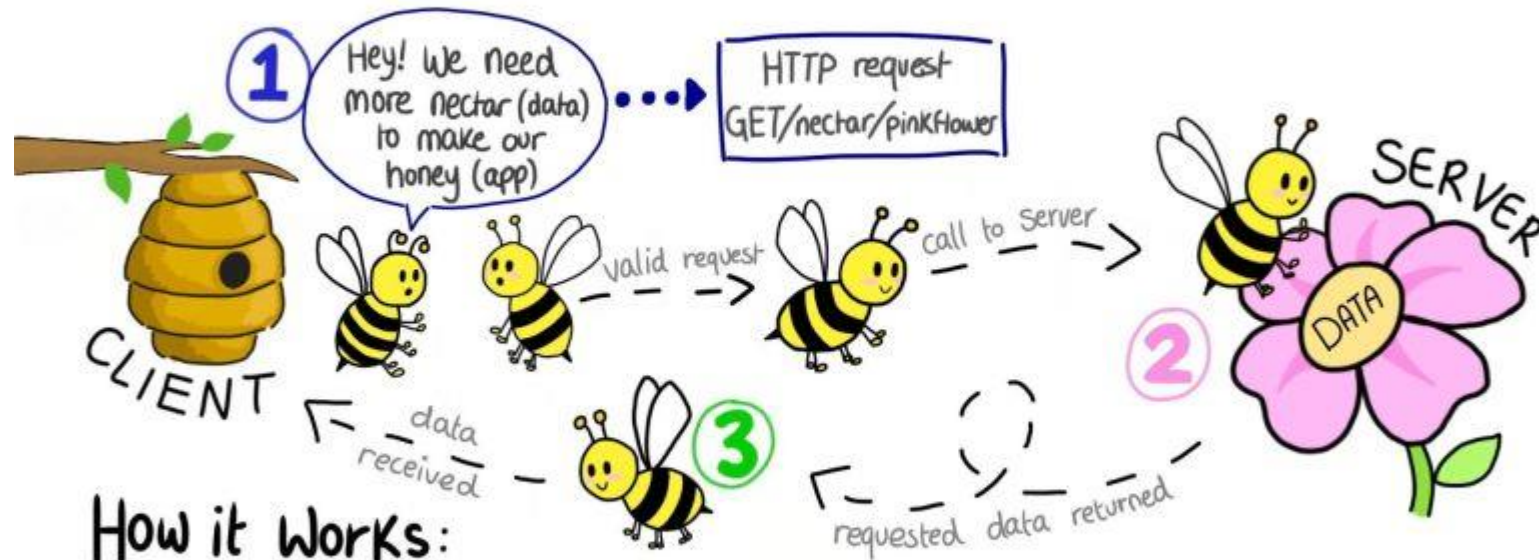
ELI5

API

What is an API?

@Rapid_API 

An application programming interface allows two programs to communicate. On the web, APIs sit between an application and a web server, and facilitate the transfer of data.



How it Works:

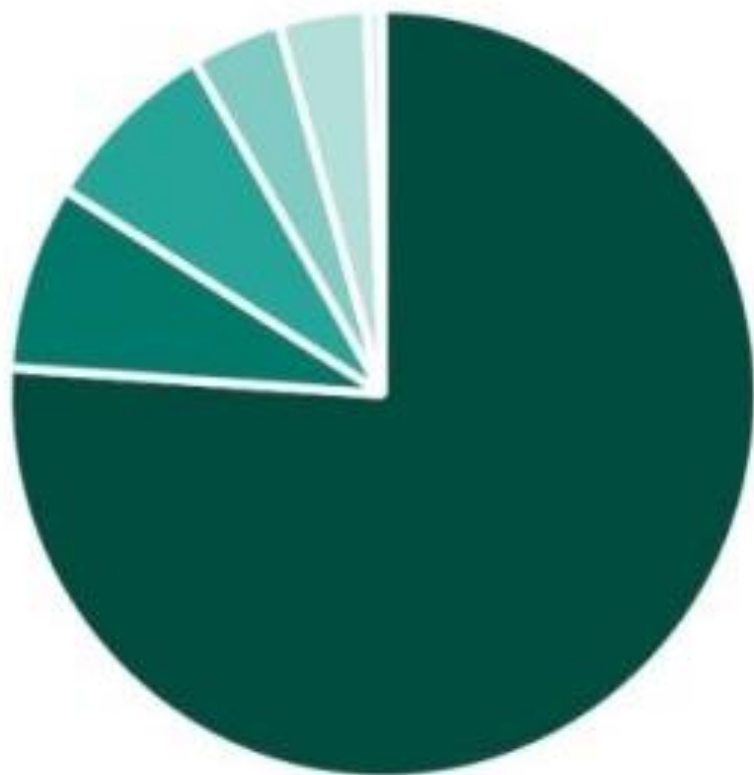
1 Request
API call is initiated by the Client application via a HTTP request

2 Receive
Our Worker bee acts as an API, going to a Flower (server) to collect nectar (data)

3 Response
The API transfers the requested data back to the requesting application, usually in JSON format

A close-up photograph of a person's hands holding a succulent plant. The person is wearing a blue and white plaid shirt. The succulent has thick, fleshy, light blue-green leaves. The background is blurred, showing more of the person and other plants.

Not this!



- White, 76.1%
- Hispanic or Latino, 7.8%
- Asian, 7.7%
- Unknown, 3.9%
- Black or African American, 3.8%
- American Indian and Alaska Native, 0.7%

Colors?

Women Earn 92¢ For Every \$1
Earned By Men

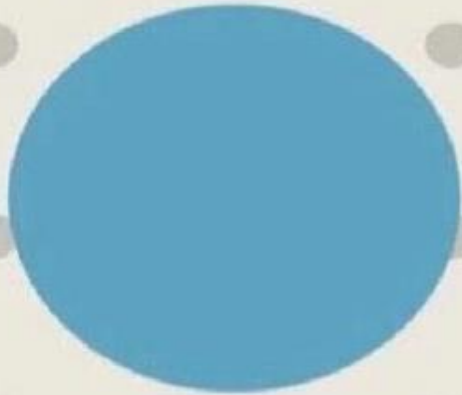


Male Income

The most common ethnicity among chief diversity officers is White, which makes up 76.1% of all chief diversity officers. Comparatively, there are 7.8% of the Hispanic or Latino ethnicity and 7.7% of the Asian

WHAT PEOPLE THINK EMPATHY IS

earthbound madness



Feeling sorry for someone

WHAT EMPATHY ACTUALLY IS



- Sensing other peoples emotions
- Imagining how someone feels
- Imagine what someone is thinking
- Mirroring someone's feelings
- Identify how a person is feeling
- Understanding another person's feelings
- Seeing things from another point of view
- Really listening to what others have to say
- Feeling overwhelmed by others tragedy

Colors?



Manual Of Me

Team manual

This is me
(drawn by me)

The conditions
I like to work in

The times/hours
I like to work

The best ways
to communicate
with me

The ways I like to
receive feedback

Things I need to
work well

Things I can
struggle with

Things I love at
work

Other things to
know about me

A user manual for me: Cassie Robinson

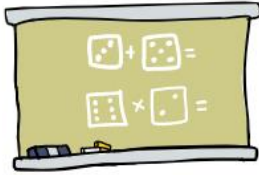
Hello,
I'm Vaishnavi



Vancouver



Things I ❤️



Teaching



Public Speaking



Visual Communication

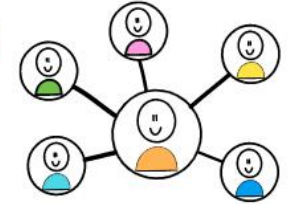
Things I do 🤖



Software Engineering



Ideation



Team collaboration

How to Give Me Feedback 📖

Direct constructive feedback provided with utmost honesty to help me grow. Data driven and candid conversations with potential solutions for me to thrive and succeed.

Comms Preferences 🌐



Working Patterns 🌞



- Morning Person
- Enjoy a quiet and vibrant environment
- Follow Pomodoro Technique 🍅

Things I struggle with 🥷



Mickey Mouse Job
#halfbaked



Yak Shaving



Interruptions

“Simple things should be simple,
complex things should be possible.” - Alan Kay



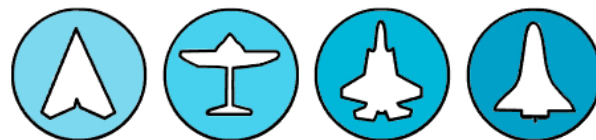


101 Switching Protocol
426 Upgrade Required

MISSION

302 Mission Found

Empower marginalized community through the power of technology, story telling and visual communication one person, one story, one visual at a time.



VISION

100 Continue
103 Early Hints

To serve as an empathetic and honest leader and use my voice as a speaker and advocating for representation in tech to improve the lives of underrepresented people..



WARNING

406 Not Acceptable
504 Gateway Timeout

- All my scheduled meetings need an agenda.
- Known to burn myself out.
- Tackle the Talkers and Enable the Doers
- Swiss Army Knife
- Struggle to take compliments
- Trying to channelise my Internal Saboteurs



MANAGEMENT style *420 Enhance Your Calm

Combination of Quiet, Servant and Visionary Leadership



```
JS HelloWorld.js  
  
document.write('Hello World');  
console.log('Hello World');  
alert('Hello World');
```

INTERESTING FACTS

200 OK
418 I'm a teapot

- I believe in the power of documentation.
#DocsOrItDidntHappen
- I thrive on honest and candid feedback.
Afterall feedback is the breakfast of the champions
- Passionate about accessibility, diversity, usability and neurodiversity.
- Love to solve 1000 piece jigsaw puzzles
- Love people watching and a selenophile



KNOWN DEFECTS

500 Internal Server Error
506 Variant Also Negotiates

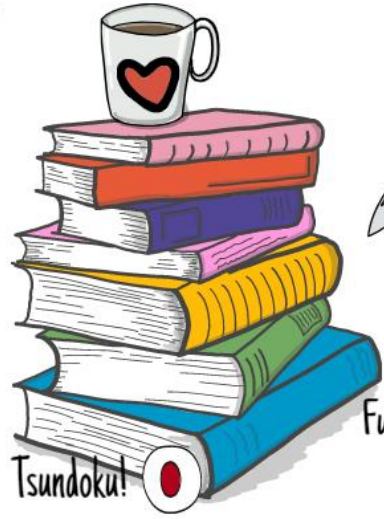
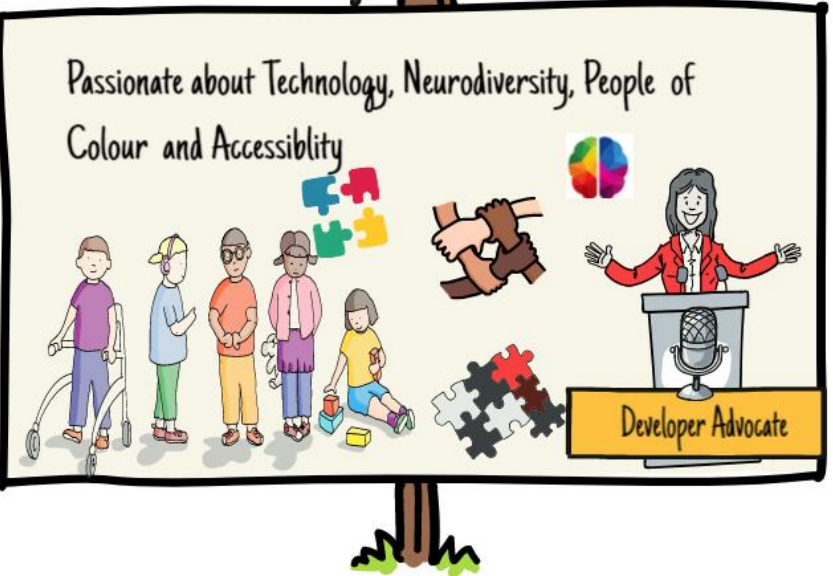
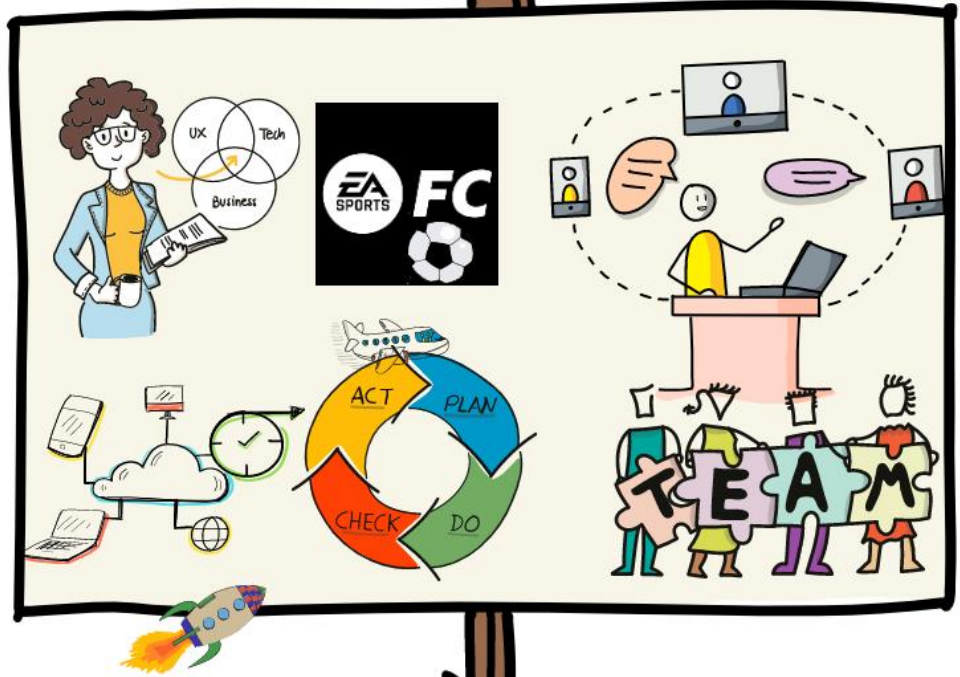
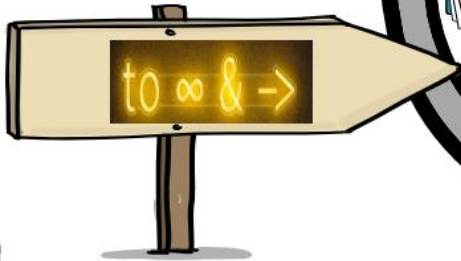
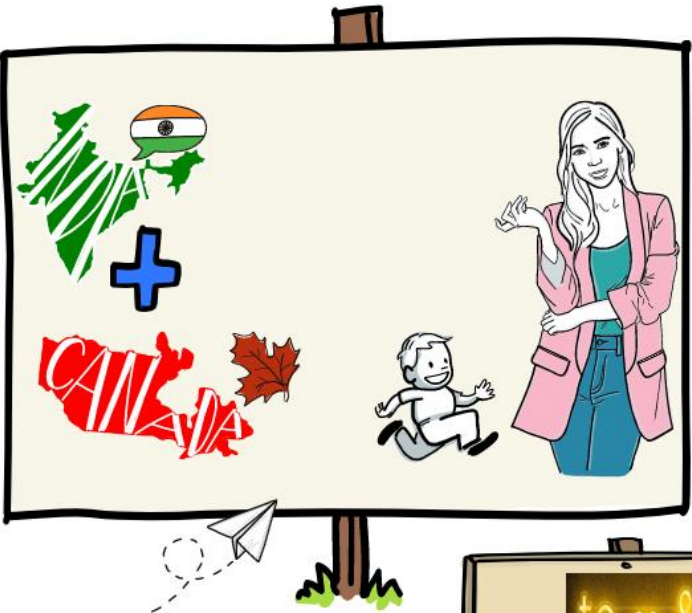
- People pleaser, leading to overcommitment
- Struggle to say no
- Self-critic
- Don't always take my own advice
- Falling victim to comparison trap
- Can get in my own way
- Sensory overload



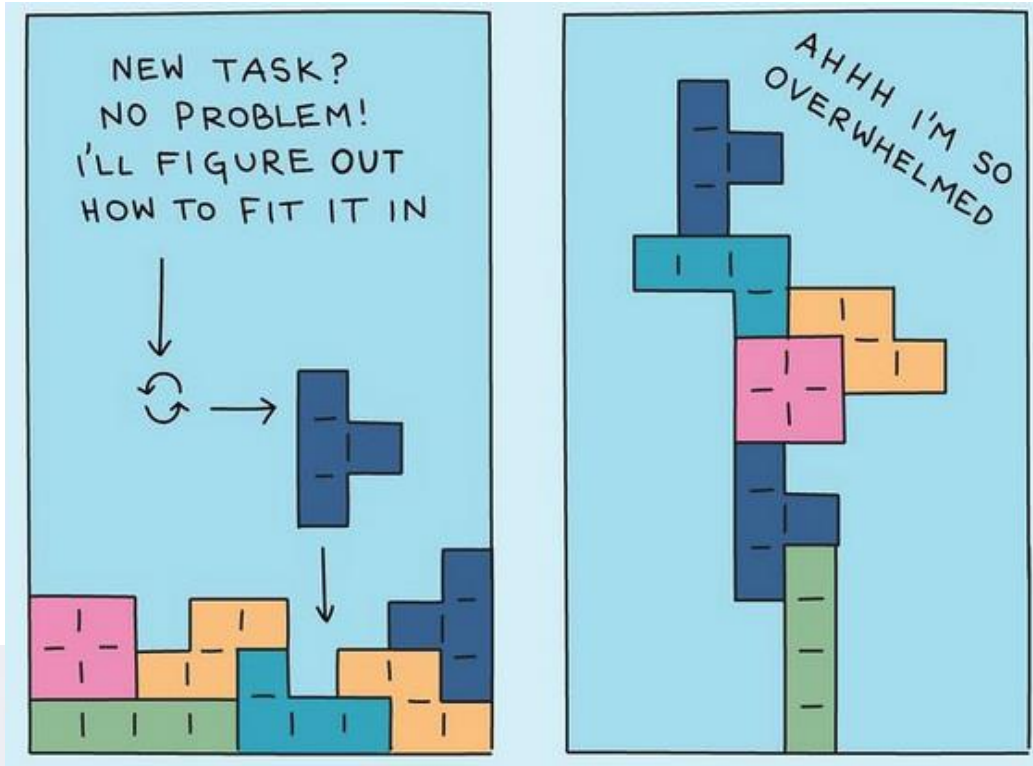
*3 digit numbers are HTTP Status Codes



Title : Manual Of Me
Version : 1.0
Release: March 2023



Ideas





What next?

Convergence

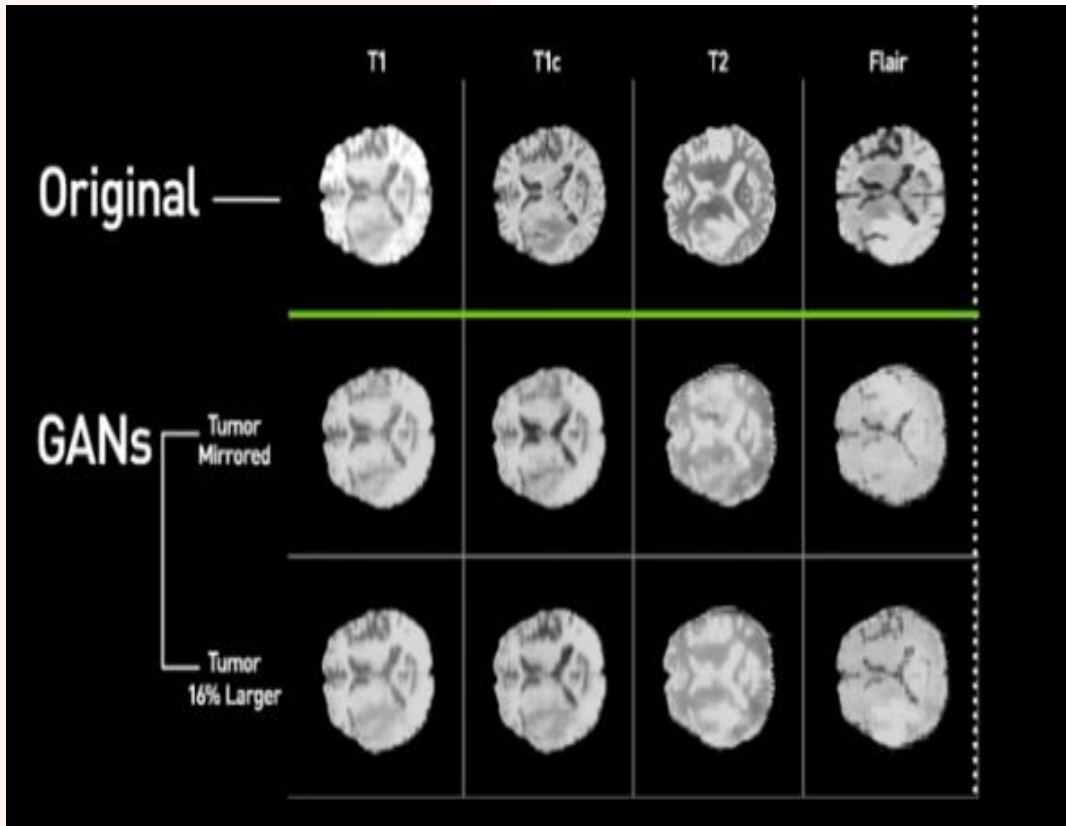
In today's digital world, AI, cloud computing, the internet of things (IoT), and superfast networks such as 5G are the cornerstones, and data is the fuel that drives them all. These technologies are some of the data science latest trends. Together, these technologies enable much more than they can do separately.

DEEPPFAKE TECHNOLOGY: SEEING IS BELIEVING, OR IS IT?



Deepfakes, Generative AI, and Synthetic data

- Synthetic faces of people who have never existed can be created to train facial recognition algorithms while avoiding the privacy concerns involved with using real people's faces.
- It can be created to train image recognition systems to spot signs of very rare and infrequently photographed cancers in medical images because of lack of data due to privacy reasons, financial constraints, and rare diseases with few examples and little data to pull from.
- To create language-to-image capabilities, allowing, for example, an architect to produce concept images of a building simply by describing how it will look in words.





Deepfakes, generative AI, and synthetic data

- Synthetic voices have been used to help patients with ALS (Amyotrophic Lateral Sclerosis) who, due to the disease, often lose some or all of their ability to speak. With the use of this technology, they can speak with their loved ones with a voice that sounds just like theirs.
- For educational purposes, deepfakes can be used to imitate teachers or bring back historical figures.
- In film, the accessible nature of deepfakes means that independent creators without huge budgets can create their art.
- online shoppers trying on clothes in virtual fitting rooms, for dynamic museum dioramas and for actors hoping to speak multiple languages in international movie releases.

Deepfakes, Generative AI, and synthetic data – Word of Caution



- Double Edged sword
- Deepfakes are often weaponized against women. The majority of deepfakes on the internet are pornographic, in which female celebrities' faces are infused into these videos.

Brave Conversations



Public event that brings together people from different walks of life, to debate and understand our fast changing reality, catalyzed by the Web and AI.

Our 21st Brave Conversations in the heart of the European Union as the world struggles to come to terms with the Age of AI for Humans



Thank you