Will PyScript replace Django?

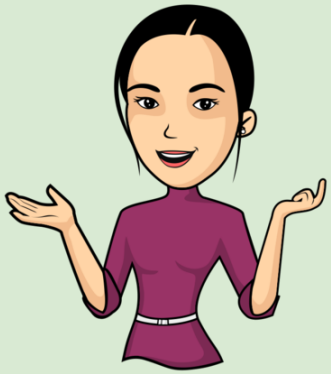
What PyScript is and is not

Cheuk Ting Ho

@cheukting_ho Cheukting https://cheuk.dev

Get this slides at
slides.com/cheukting_ho/pyscript-django

Have you heard of PyScript?



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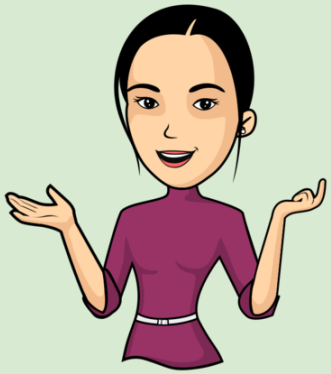

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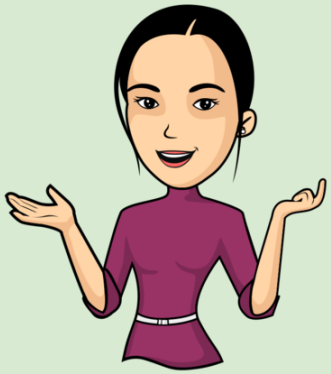

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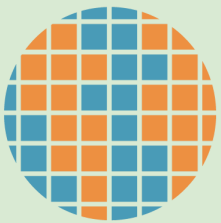
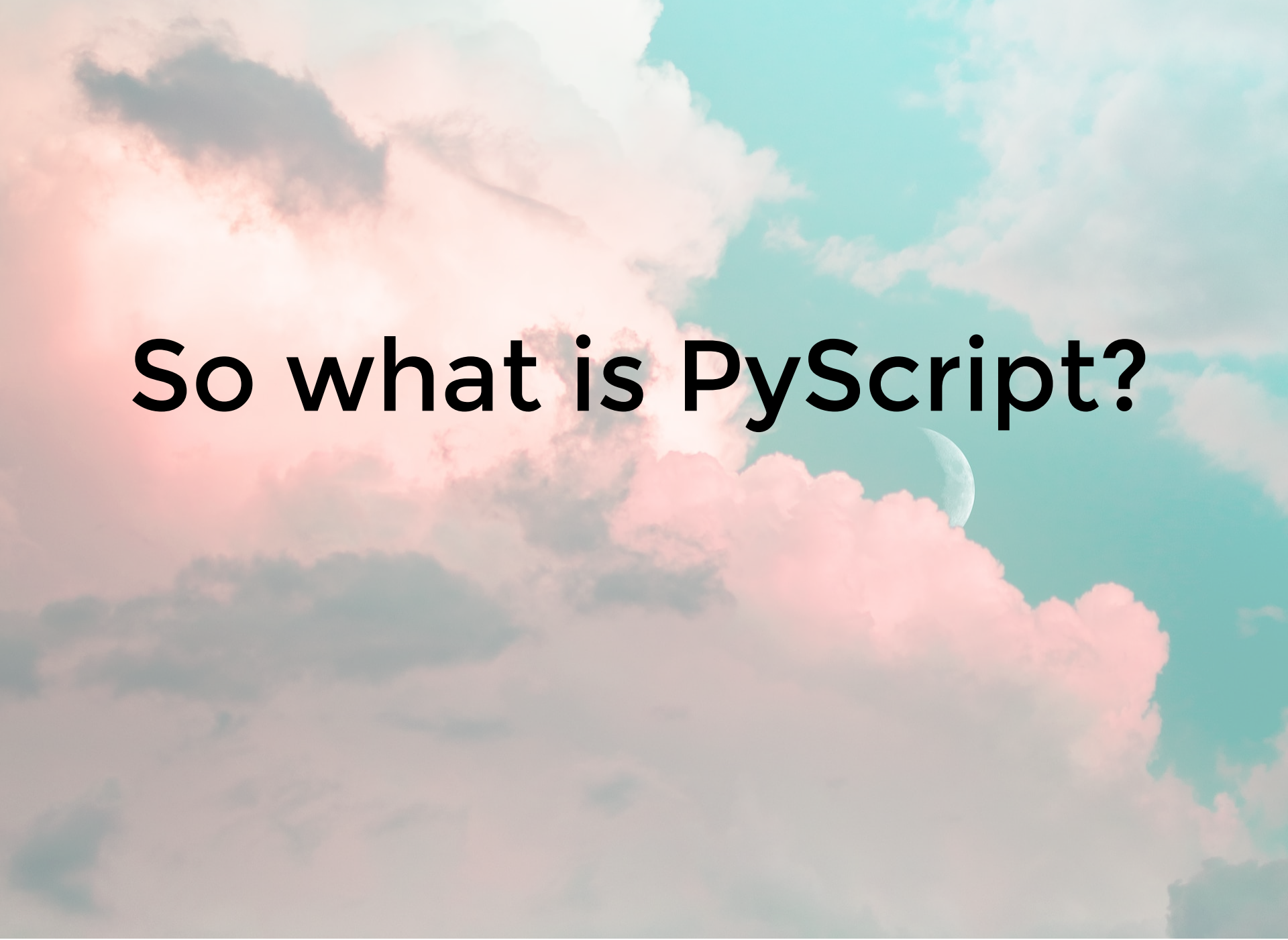
PYTHON
SPRINTS



PyData
Global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- not to replace JavaScript,
  but rather, you can use with it
- thanks to Pyodide and WASM
- many popular packages of Python avaliable


This is how to use
PyScript

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    <h1>Let's plot random numbers</h1>
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Or you can download and host it yourself

Just like other JS CDN

The <py-config> tag

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(default)

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json format

load in config source

```
<py-config type="json" src="./custom.json"></py-config>
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- load in local modules (fetch)
- change runtime settings (e.g. setting runtime source)
- adding meta data (e.g. decription, author_name, license)

The <py-repl> tag

Interactive Python interface (like jupyter notebook)

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Why is it useful?

a.k.a why do it on frontend

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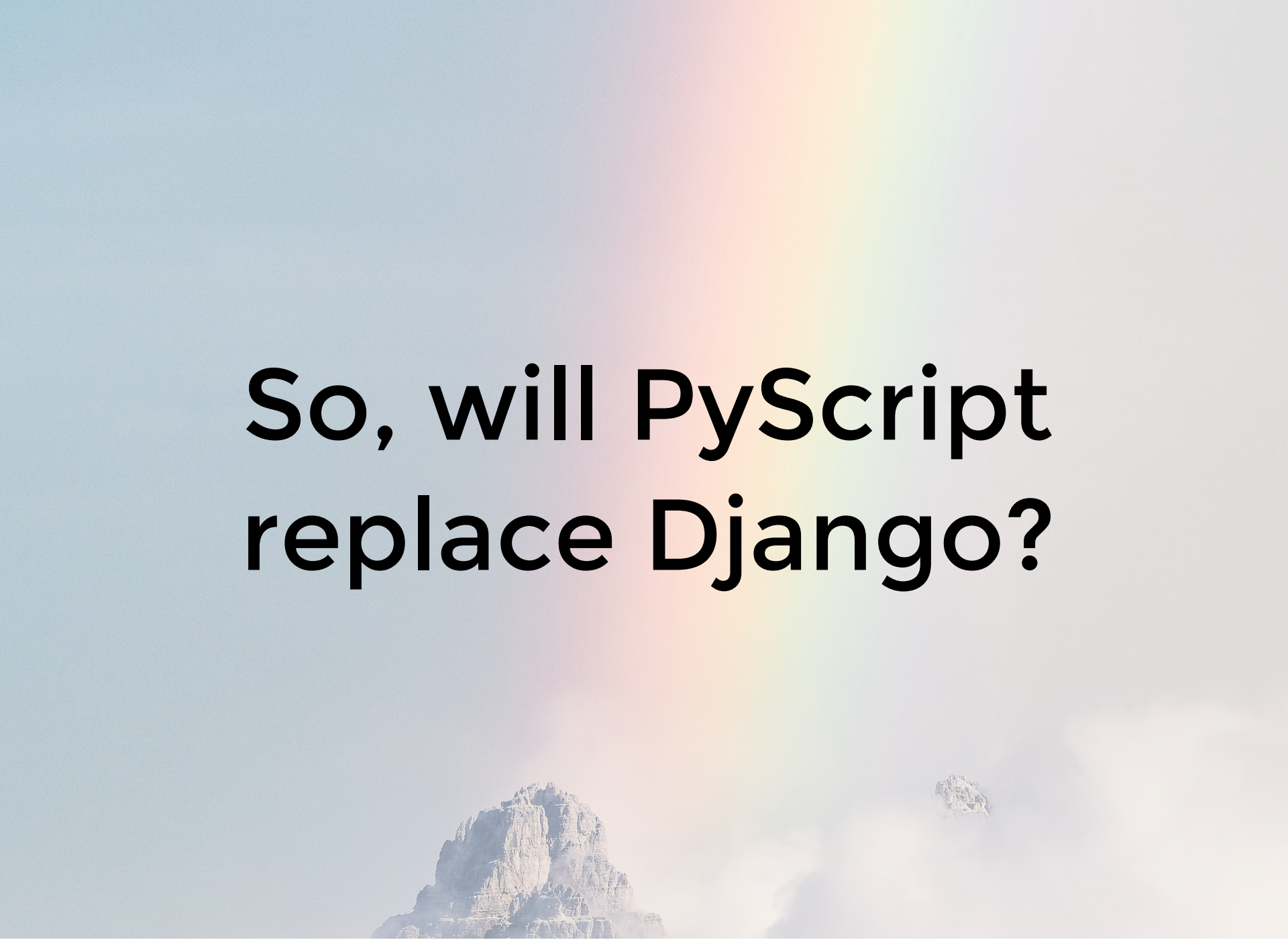
- Don't want to provide a playground (crypto mining)
- Data too sensitive to leave user's own machine

So, will PyScript replace Django?




No,
but we can make some amazing stuff if we use them together 🙌

Here is an example

Using PyScript with Django

https://github.com/Cheukting/django-knn-recommender

Other examples

Running Django with Pyscript - Frontend as a Backend?!

https://absurd-django.vercel.app/

by Patrick Arminio

More Pyscript examples...

- Interactive plot
  https://cheuk.dev/assets/html/interactive_network_graph.html
- Using Follim for map plotting
  https://pyscript.net/examples/folium.html
- Interactive plot with d3 (We can now `import d3`)
  https://cheuk.dev/assets/html/ice-cream-d3.html

PyScript Tutorial [WIP]:

https://github.com/anaconda/pyscript-tutorial

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- Why can't you use `<script tag="python">`
  - Because `<script>` is not a custom tag and it is defined by the browser which none of them is supporting Python yet

- Why don't you just use Pyodide?
  - It's like we use Keras to simplify using TensorFlow, PyScript make it easier to using Python on the browser

Q & A

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- Can you pin a package version at <py-config>?
  - Right now you cannot, but you can host the wheel yourself (see example here)

- What is the difference between PyScirpt and Brython?
  - PyScript is interpreting Python to WASM instead of JS and has many popular packages available
  - You can also pick which Python WASM backend to use

- Any plan to support BeeWare?
  - I would love to personally, we will see