

 **Where Is Python Used?**



Python Mauritius UserGroup (pymug)

More info: mscc.mu/python-mauritius-usergroup-pymug/

Where Are We? 🏠

Why	Where
codes	github.com/pymug
share events	twitter.com/pymugdotcom
ping professionals	linkedin.com/company/pymug
all info	pymug.com
discuss	facebook.com/groups/318161658897893
tell friends by like	facebook.com/pymug

Updates

Our mailing list:

<https://mail.python.org/mailman3/lists/pymug.python.org/>

Abdur-Rahmaan Janhangeer
python developer

twitter: [@osdotsystem](#)

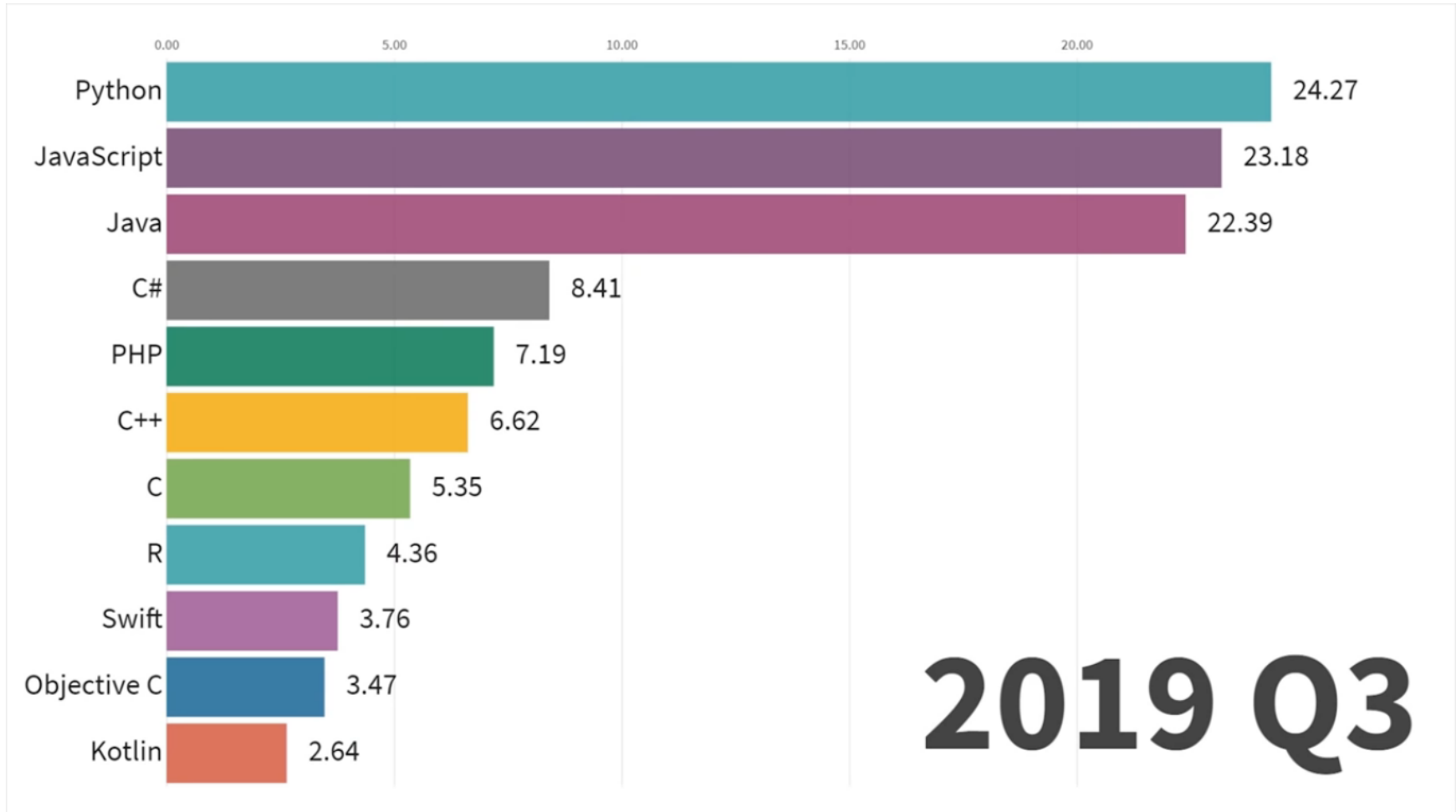
github: github.com/abdur-rahmaanj

www.pythonmembers.club

Where Is Python Used?

Python is simple to get started with, great to have at hand, quick for prototypes, has some serious applications, improves constantly and continues to sneak in ever new fields. Let's see some applications

World's most popular language

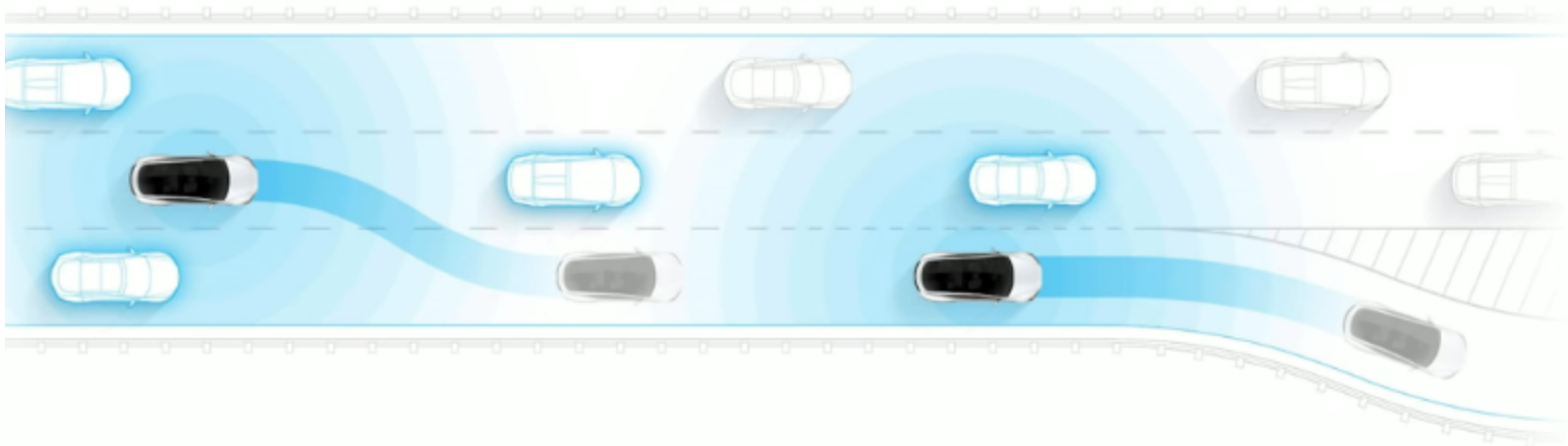
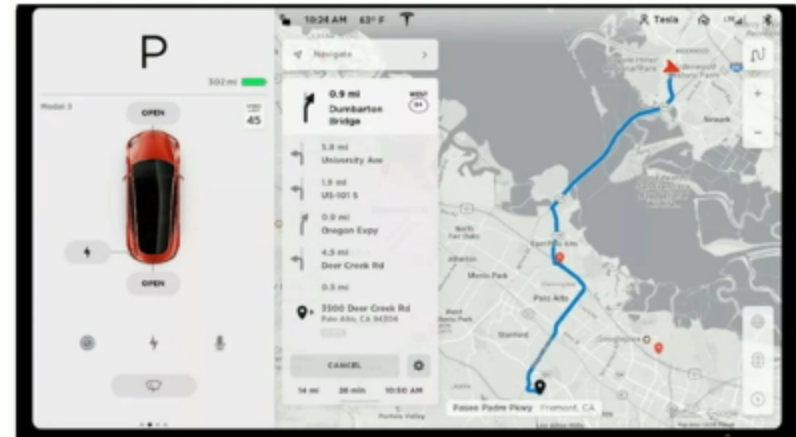




Tesla: A Python Story

Tesla integrates cutting edge technologies for it's cars

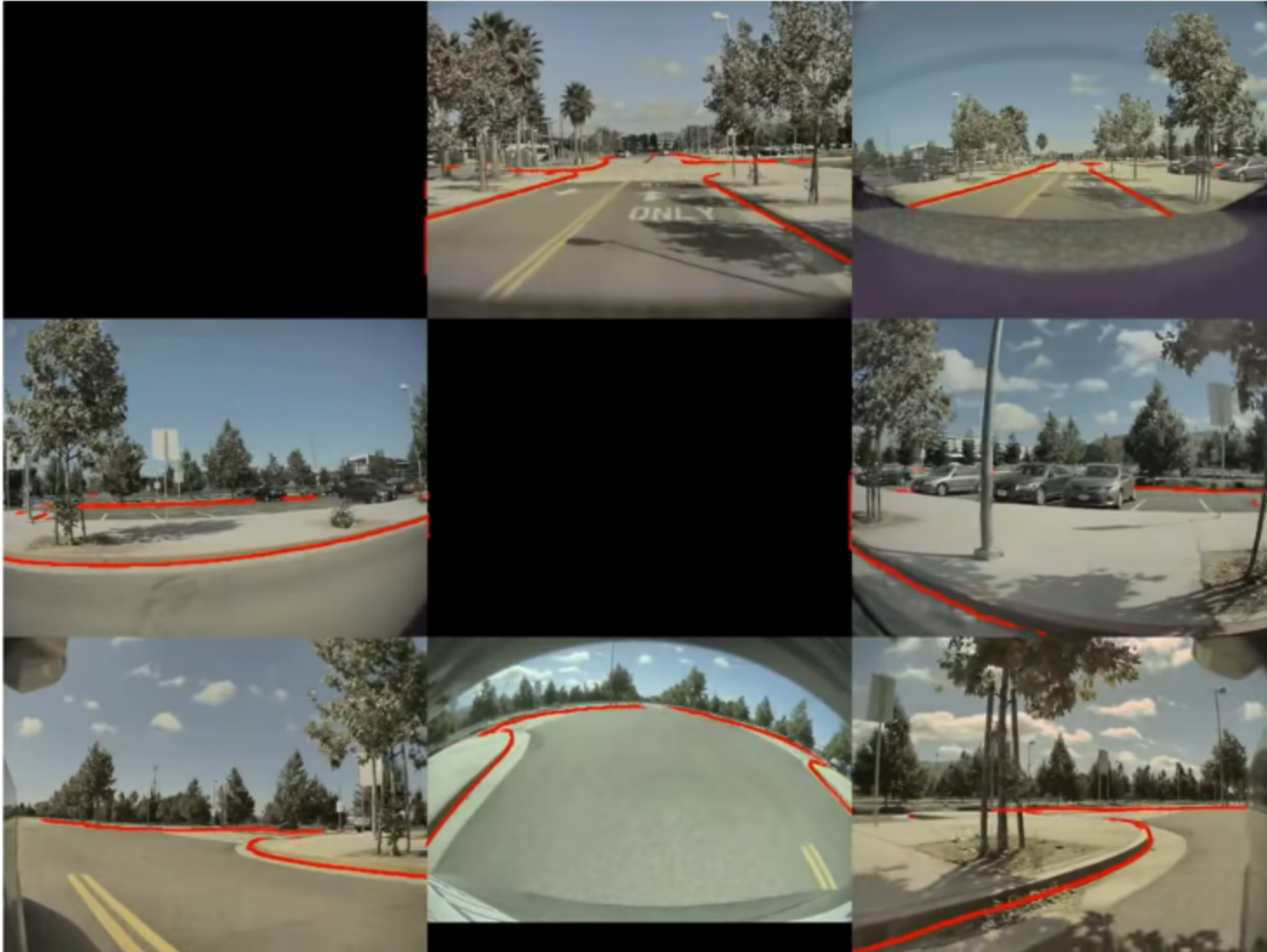
- auto navigation
- automatic lane change



- auto summon: call your car like it's a pet

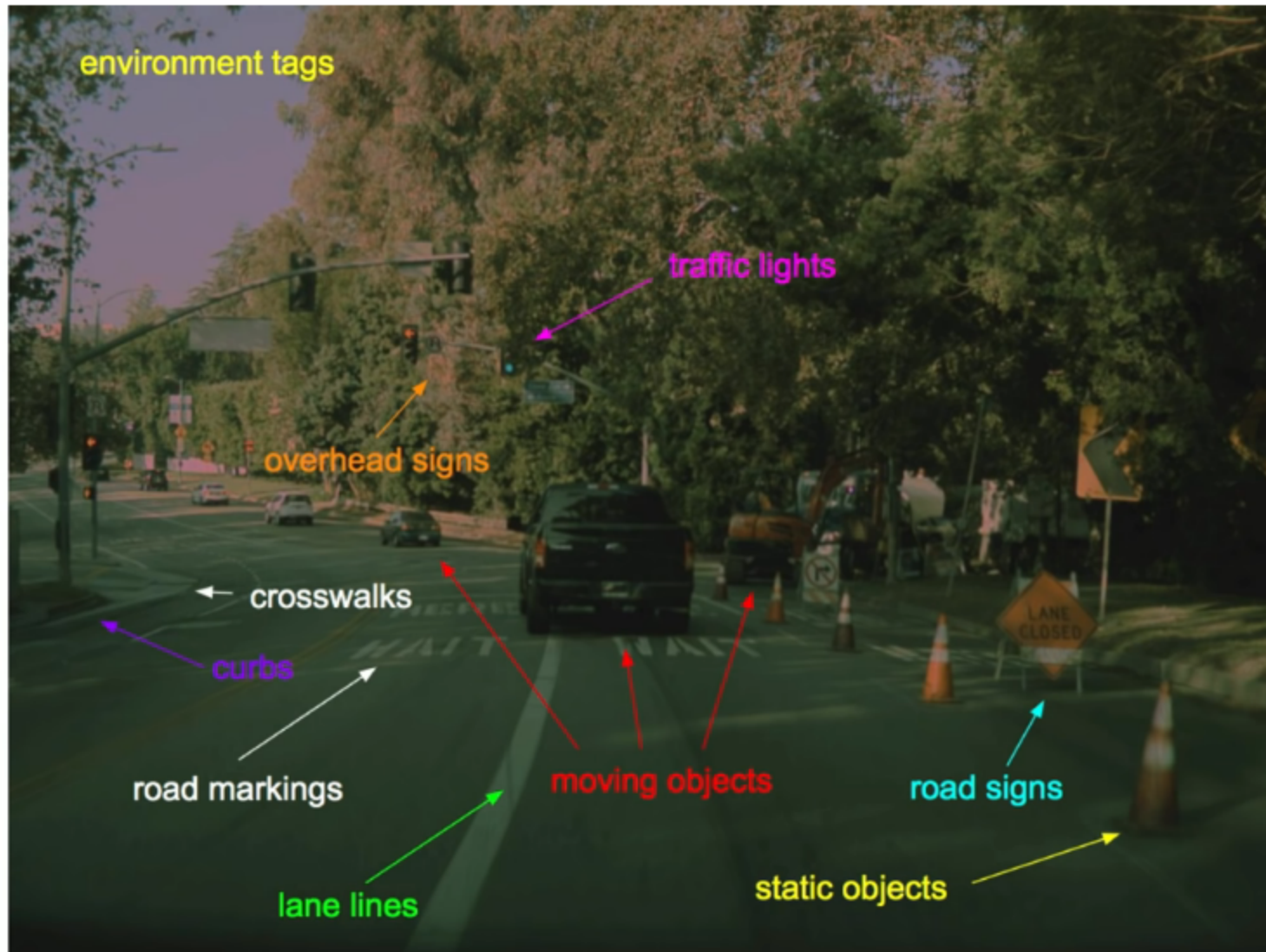


view of feed with contours identified





identifies beyond contours



training size (no. of images input)



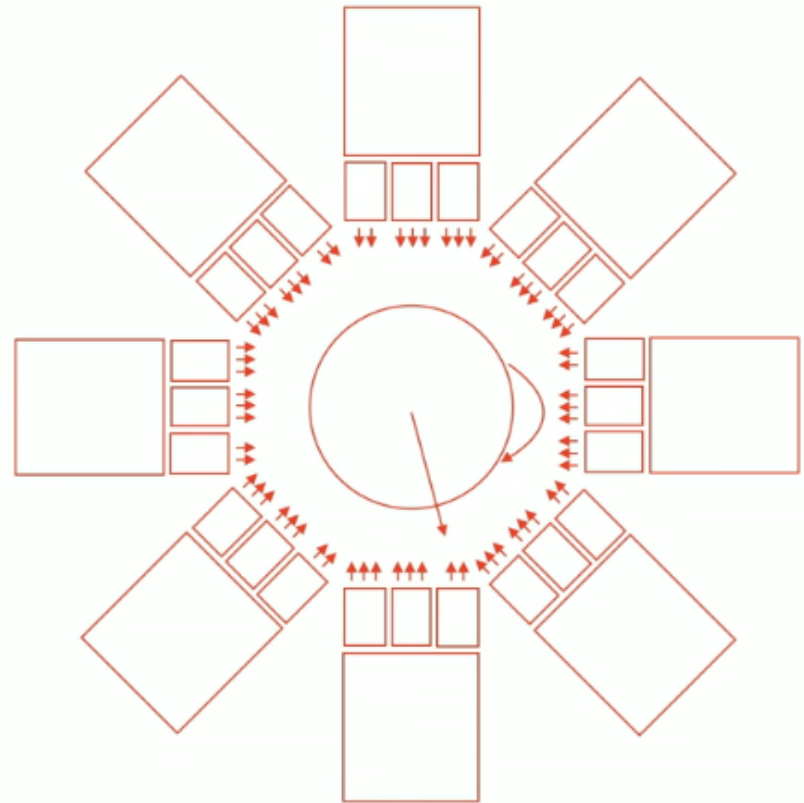
e.g.:

8 cameras, 16 time steps, batch size 32:

$8 \times 16 \times 32 = \mathbf{4096 \text{ images}}$

in a single forward pass

Requires a combination of data parallel
and model parallel training



Add to it: 800, 000 auto summon sessions



NAVIGATE ON AUTOPILOT



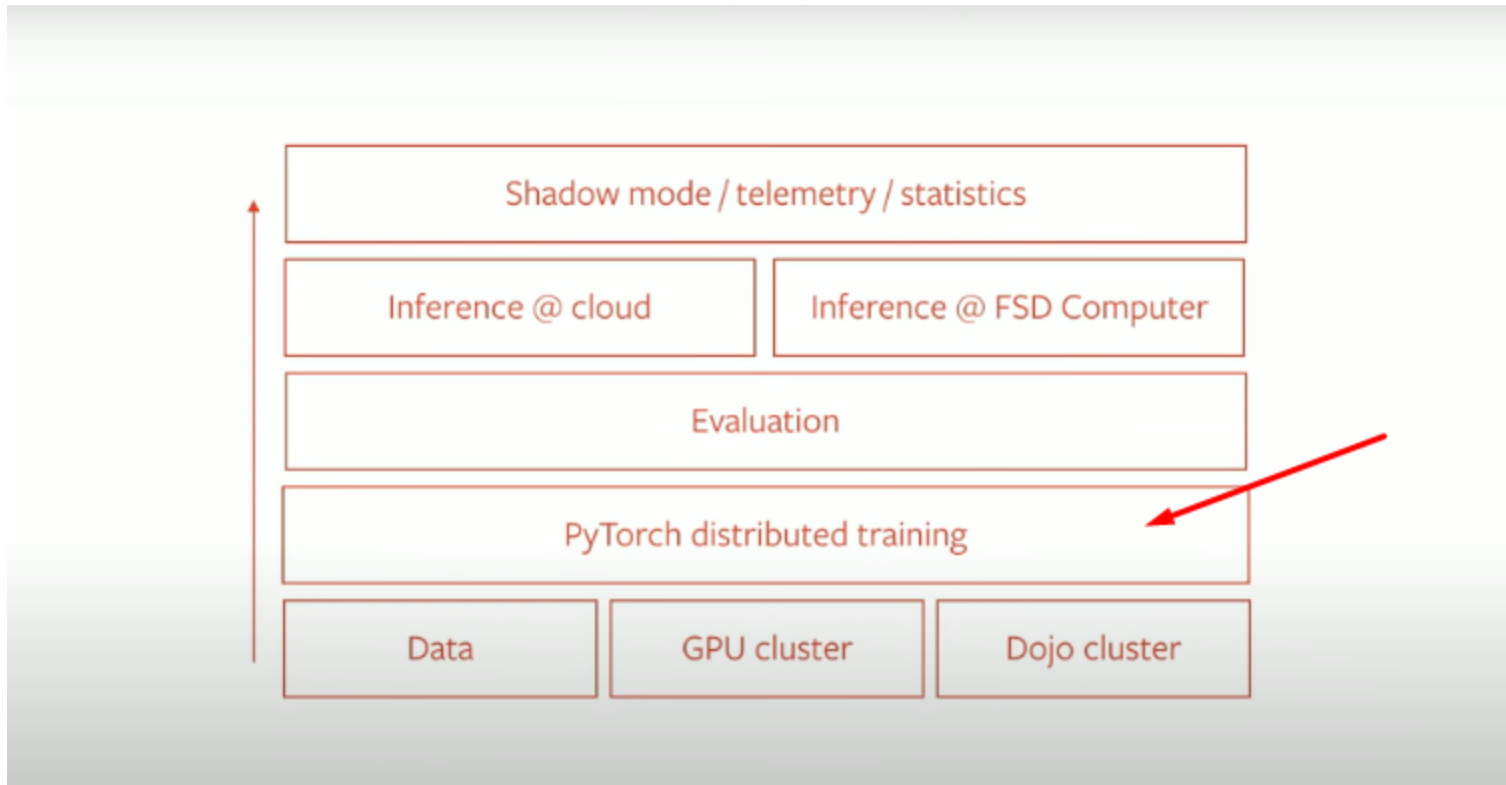
1,000,000,000
miles on NoA

200,000
automated lane changes

50+
countries

 PyTorch

Lib behind Computer Vision: PyTorch



Primarily developed by Facebook's AI Research lab

How Big Companies Use Python? 🍭

References at the end of slides ~



*At LinkedIn we ship
hundreds of command line
utilities to every machine in
our data-centers and all of
our employees workstations.
The vast majority of these
utilities are written in
Python.*

(shiv docs)



*Instagram Server is entirely
Python powered. Well,
mostly.*

([instagram-
engineering.com](https://instagram-engineering.com))



We decided that Python was fast enough for most of what we need to do (since we push our performance-critical code to backend servers written in C++ whenever possible). As far as typechecking, we ended up writing very thorough unit tests which are worth writing anyway, and achieve most of the same goals. We also had a lot of confidence that Python would continue to evolve in a direction that would be good for the life of our codebase, having watched it evolve over the last 5 years.

(CEO of Quora)

Psst: type checking on large codebases is a common argument on why not to use Python, that's why he included it above.



Python aficionados are often surprised to learn that Python has long been the language most commonly used by production engineers at Facebook.

(engineering.fb.com)



Our Data Science and Engineering teams rely heavily on Python to help surface insights from the vast quantities of data produced by the organization

(netflix-techblog)



*Python is heavily used by the
Facebook infrastructure teams and is
ubiquitous in production engineering
(engineering.fb.com)*



The Dropbox desktop client is written in Python, it's one of if not the largest piece of desktop client software that is out, and Dropbox has 400 million users

(Director Of Engineering At
Dropbox)



(Reddit Co-founder)

The other thing that keeps us on Python, and this is the major thing, is how readable and writable it is. When we hire new employees ... I don't think we've yet hired an employee who knew Python. I just say, "everything you write needs to be in Python." Just so I can read it.



Spotify's backend consists of many interdependent services, connected by own messaging protocol over ZeroMQ. Around 80% of these services are written in Python

(Spotify Labs)



*Pinterest is powered by a large
Python codebase*

(pinterest-engineering)



We intend in our coming sessions cover a LOT of Python topics, as long as you are at home. Topics include web, desktop, Ai, devops, webscraping ...



Stay updated with Python news in Mauritius

<https://mail.python.org/mailman3/lists/pymug.python.org/>

References:

DataIsBeautiful, evidenced by

<https://insights.stackoverflow.com/survey/2019>

PyTorch At Tesla, Andrej Karpathy

Quotes references pulled from: <https://github.com/Abdur-rahmaanJ/pytestimonials>

Icons from iconfinder