

Python Workshop

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```
32 self.fingerprints = set()
33 self.logdups = True
34 self.debug = debug
35 self.logger = logging.getLogger(__name__)
36
37 if path:
38     self.file = open(os.path.join(path, 'requests.log'),
39                     'a')
40     self.file.seek(0)
41     self.fingerprints.update(request)
42
43 @classmethod
44 def from_settings(cls, settings):
45     debug = settings.getbool('debug', False)
46     return cls(job_dir(settings), debug)
47
48 def request_seen(self, request):
49     fp = self.request_fingerprint(request)
50     if fp in self.fingerprints:
51         return True
52     self.fingerprints.add(fp)
53     if self.file:
54         self.file.write(fp + os.linesep)
55     print(self, request)
```


Python? What's that?

- Released in 1991
- Created by: **Guido van Rossum**
- **Goals**
 - An easy and intuitive language just as powerful as major competitors.
 - Open source, so anyone can contribute to its development.
 - Code that is as understandable as plain English.
 - Suitability for everyday tasks, allowing for short development times.



Current Ranking by Popularity

Sep 2019	Sep 2018	Change	Programming Language	Ratings	Change
1	1		Java	16.661%	-0.78%
2	2		C	15.205%	-0.24%
3	3		Python	9.874%	+2.22%
4	4		C++	5.635%	-1.76%
5	6	▲	C#	3.399%	+0.10%
6	5	▼	Visual Basic .NET	3.291%	-2.02%
7	8	▲	JavaScript	2.128%	-0.00%
8	9	▲	SQL	1.944%	-0.12%
9	7	▼	PHP	1.863%	-0.91%
10	10		Objective-C	1.840%	+0.33%

Figure 3: TIOBE Index (as of September 2019)

Python Developers Survey

- Developer survey conducted by JetBrains & Python Software Foundation
- Most recent results: **2018**
- 20,000+ developers participated
- 150+ countries

<https://www.jetbrains.com/research/python-developers-survey-2018/>

Who uses Python?

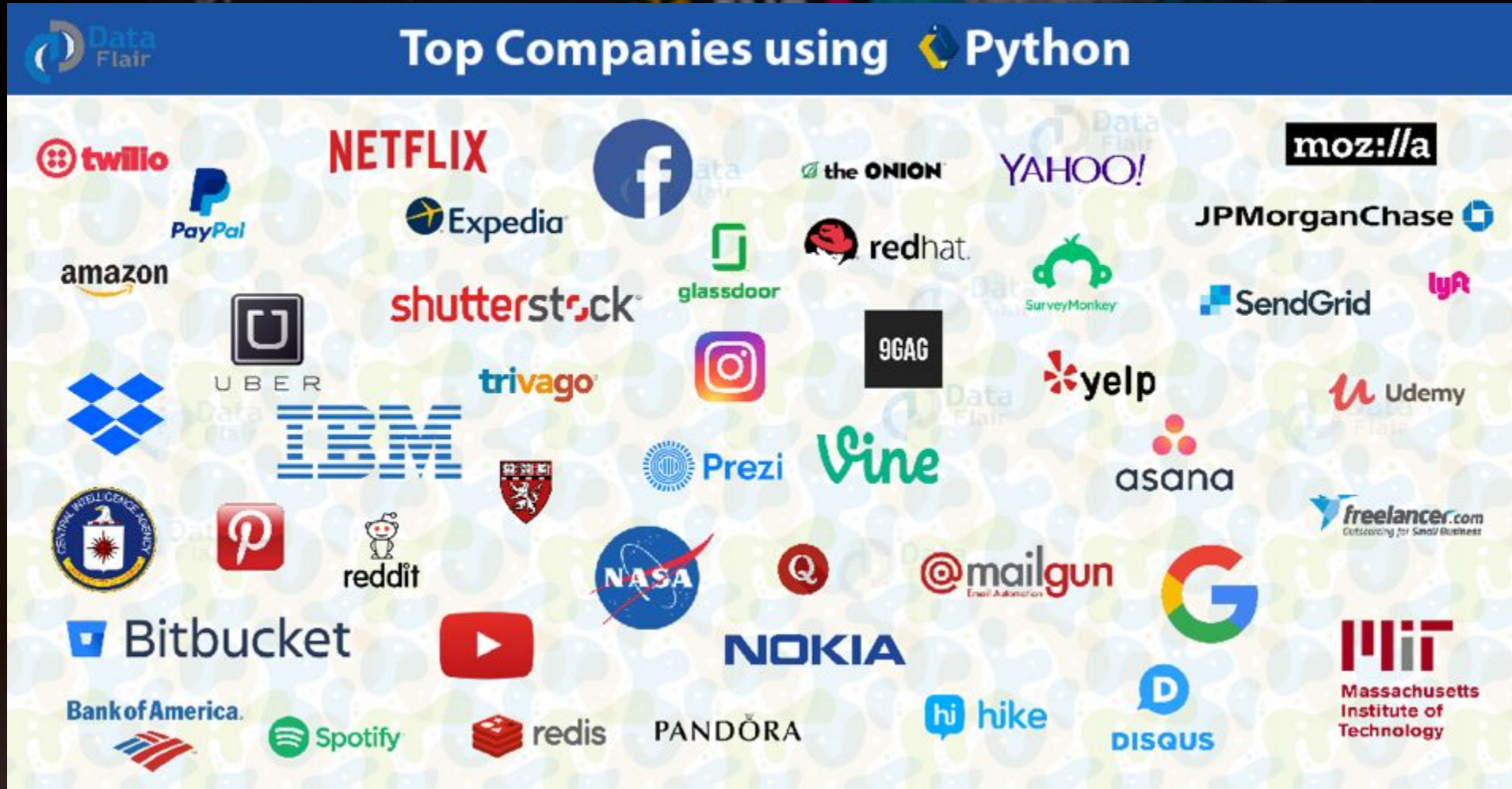


Figure 4: Top companies using Python

Average Python Developer Salary

\$117,890 per year

Source: Indeed.com

Let's Code!

<https://bit.ly/2p2k3UJ>

(Google Collab)

```
32 self.fingerprints = set()
33 self.logdups = True
34 self.debug = debug
35 self.logger = logging.getLogger(__name__)
36
37 if path:
38     self.file = open(os.path.join(path, 'requests.txt'),
39                     'a')
40     self.file.seek(0)
41     self.fingerprints.update(re.findall(r'(?i)[a-z0-9]{4,10}',
42                                       re.sub(r'[\s/]', ' ',
43                                             request.url)))
44
45 @classmethod
46 def from_settings(cls, settings):
47     debug = settings.DEBUG
48     return cls(os.path.join(dir(settings), 'logs'))
49
50 def request_seen(self, request):
51     fp = self.request_fingerprint(request)
52     if fp in self.fingerprints:
53         return True
54     self.fingerprints.add(fp)
55     if self.file:
56         self.file.write(fp + os.linesep)
57
58 def print(self, request):
```