



adaptTo()

EUROPE'S LEADING AEM DEVELOPER CONFERENCE

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AEM Data Science: AEMpy

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1. Install Docker
2. `docker pull odyssee/adaptto_aempy`
3. `docker run -p 8888:8888 -p 4502:4502 -it --rm odyssee/adaptto_aempy bash`
4. `sh ./start.sh`

Definition

What is a Data Scientist?

- Cool word for “Statistician” or “Analyst”
- Answers questions with facts and numbers
- On free time:
 - DS does AI/ML
 - Compete on Kaggle.com (Google)

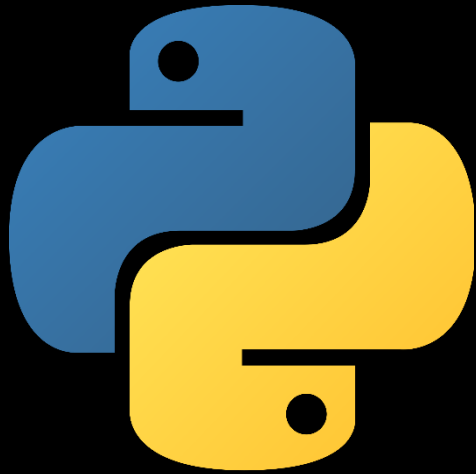
The Workshop (second part)

1. Data Science in AEM using **Python** with **AEMpy**
2. Building Data Science Reports using AEM data and **Jupyter Notebook**

Why Python?

- Simple, Fast
- Strong Scientific Libraries:
 - Scikit Learn, Numpy, Pandas
- Machine Learning Libraries:
 - Pytorch (Facebook), TensorFlow (Google), MXNet(Apache)
- Graphics and Visualization tools

What is AEMpy?



Python



Assets
Logs
Pages
Repository
...



AEM

What is Jupyter?

jupyter covid_19_dashboard Last Checkpoint: Last Friday at 11:45 PM (unsaved changes) ✓

jupyter batchdemo Last Checkpoint: a minute ago (autosaved)

```

In [13]:
from
from ij
from II

In [2]:
import pandas as pd
import folium
from matplotlib.colors import Normalize, rgb2hex
import matplotlib.cm as cm

In [4]:
data = pd.read_csv('http://earthquake.usgs.gov/earthquake...')
norm = Normalize(data['mag'].min(), data['mag'].max())

map = folium.Map(location=[48, -102], zoom_start=3)
for eq in data.iterrows():
    color = rgb2hex(cm.OrRd(norm(float(eq[1]['mag']))))
    map.circle_marker([eq[1]['latitude'], eq[1]['longitude']],
                    popup=eq[1]['place'],
                    radius=20000*float(eq[1]['mag']),
                    line_color=color,
                    fill_color=color)
map.create_map(path='results/earthquake.html')

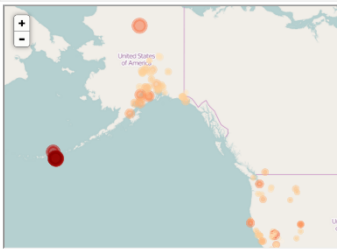
In [14]:
load
confirm
recover
country

In [15]:
confirm

In [16]:
recover

In [17]:
death

In [18]:
country
    
```



```

In [5]:
library(plotly)
set.seed(100)
d <- diamonds[sample(nrow(d),
                    plot_ly(d, type = 'scatter',
                            x = -carat, y = -price,
                            color = -carat, size
                            text = ~paste("Clari
    
```

Random Timeseries




Print CSV PDF Show 10 entries

| | A | B | C | D | E |
|---|-----------|-----------|-----------|-----------|-----------|
| 0 | -1.927472 | -0.565811 | -0.194732 | 0.586256 | 1.268616 |
| 1 | -0.379804 | -0.646807 | 0.045178 | -0.332298 | 0.593899 |
| 2 | 0.086239 | 1.408480 | 0.423698 | -0.789248 | 1.031292 |
| 3 | -1.870883 | -1.183483 | 0.950557 | 1.506439 | 0.065895 |
| 4 | 0.498993 | -1.112911 | 0.422306 | 1.283520 | 0.344755 |
| 5 | 0.464491 | -0.279040 | -1.783963 | -0.105274 | -0.665488 |
| 6 | 0.805418 | -0.026904 | 0.168411 | -0.038913 | 0.032459 |
| 7 | -0.051957 | 0.012340 | -0.805952 | 0.491427 | -0.936789 |
| 8 | 0.666687 | 0.484633 | -0.612099 | -0.249703 | -0.493733 |
| 9 | -0.101493 | -0.864194 | 0.171102 | -0.034482 | -0.369235 |

Showing 1 to 10 of 50 entries

Previous 1 2 3 4 5 Next



Let's Start!

What's Next?

- Fork and contribute:
 - github.com/houseofai/aempy