PYTHON FOR
EVERYBODY

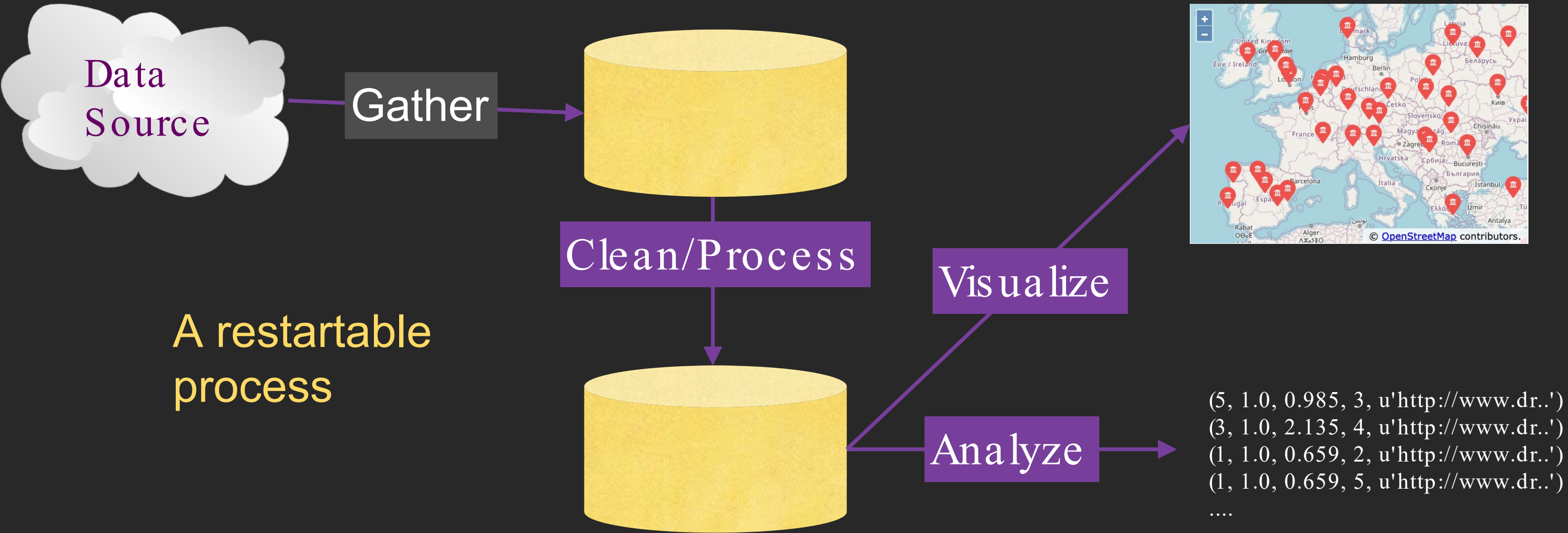# Retrieving and Visualizing Data

Charles Severance

Python for Everybody
www.py4e.com

Multi-Step Data Analysis

Many Data Mining Technologies

- https://hadoop.apache.org/

- http://spark.apache.org/

- https://aws.amazon.com/redshift/

- http://community.pentaho.com/

- ....

"Personal Data Mining"

- Our goal is to make you better programmers – not to make you data mining experts
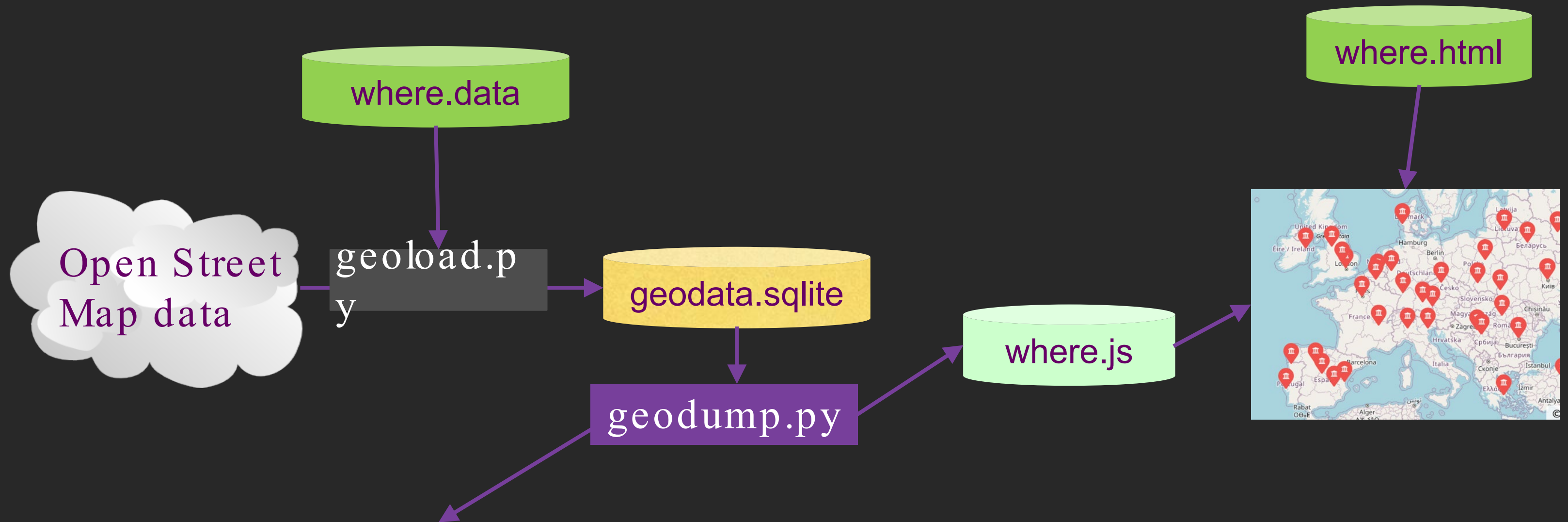
OpenGeo

- **Makes an annotated Open Street Map from user entered data**

- **Uses the proxied GeoAPI API**

- **Caches data in a database to avoid rate limiting and allow restarting**

- **Visualized in a browser using the Open Street Map**

http://www.py4e.com/code3/opengeo.zip

where.data

where.html

Open Street
Map data

geoload.py

geodata.sqlite

geodump.py

where.js

Northeastern University, ... Boston, MA 02115, USA 42.3396998 -71.08975
Bradley University, 1501 ... Peoria, IL 61625, USA 40.6963857 -89.6160811
...
Technion, Viazman 87, Kesalsaba, 32000, Israel 32.7775 35.0216667
Kokshetau, Kazakhstan 53.2833333 69.3833333
...
Technical University Munich 48.14907275 11.567444920339295
178 records written to where.js
Open where.html to view the data in a browser

http://www.py4e.com/code3/opengeo.zip

Summary

- **We have explored many aspects of accessing data on the web from Python**

- **This is only the beginning – you can take this in a lot of directions.**

Acknowledgements / Contributions

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