

# Retrieving and Visualizing Data

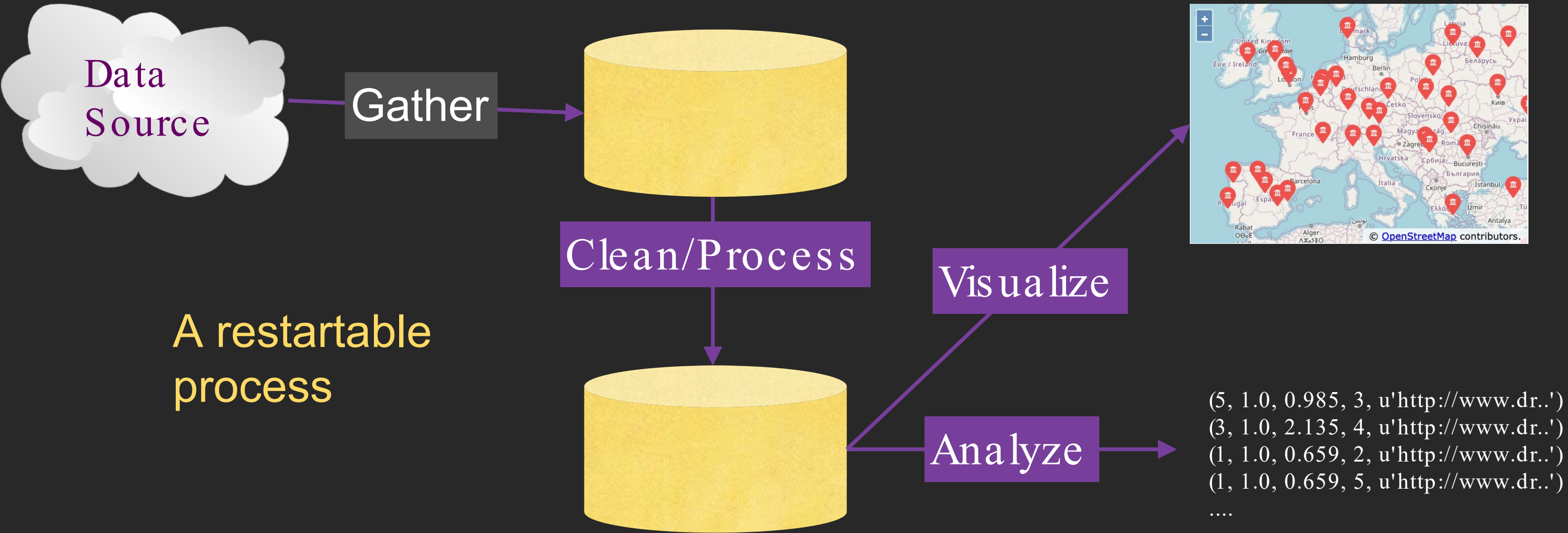
Charles Severance



Python for Everybody  
[www.py4e.com](http://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

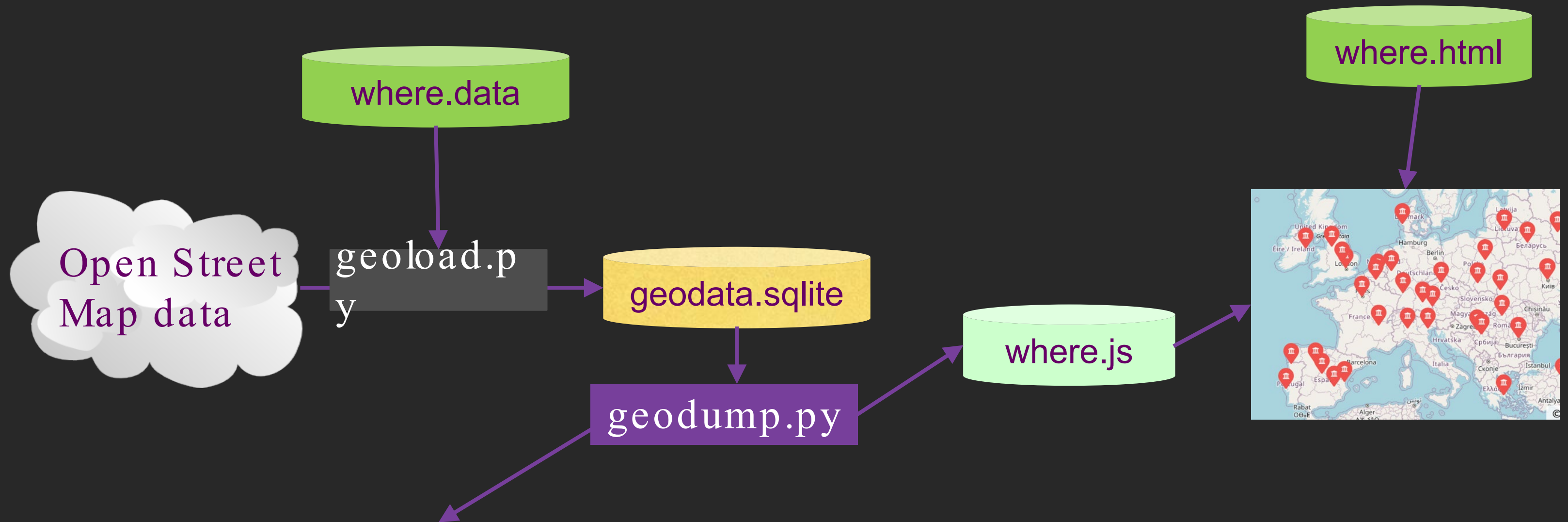
# OpenGeo

- **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>





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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Initial Development: Charles Severance, University of Michigan School of Information

... Insert new Contributors here