Geography for Hackers

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Agenda

What is QGIS?

Concepts

Goals

Other Courses

Resources

https://github.com/joeblankenship1
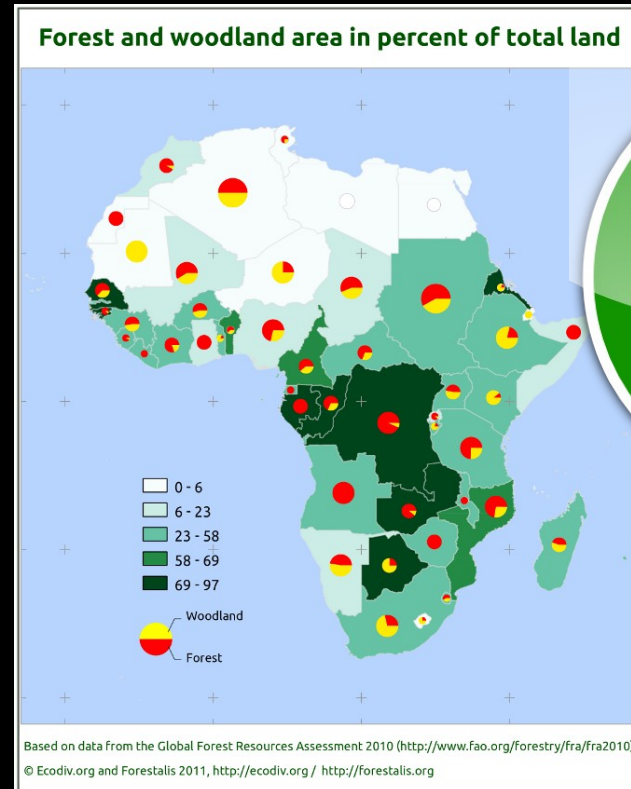
What is QGIS?

- GIS Analysis Suite

- Free and Open Source

- Windows, Mac, Linux, BSD, and Android

- Create, Edit, Visualize, Analyze, Publish

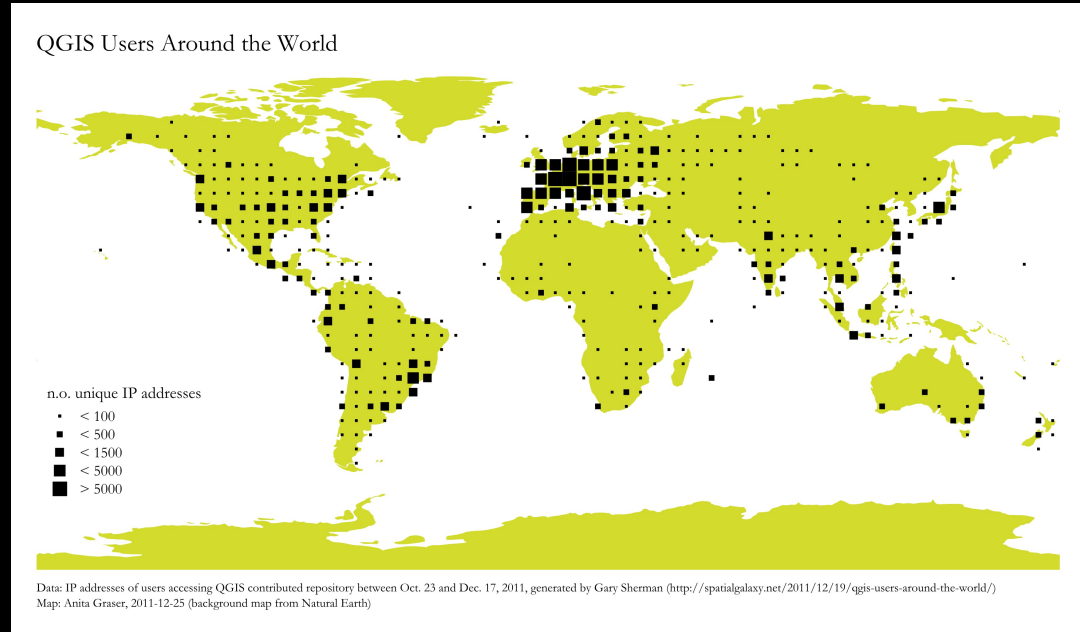- Desktop, Browser, Server, Web Client, Android (Beta)
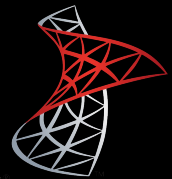
What is QGIS?

- **Diverse Global User Base**
    - World Bank
    - NGOs
    - Local, State, Federal Governments

- **Works with...**
    - OSM, OpenGeo Suite, Python, MapBox, Google, Oracle, SQLServer, Bing, and more!

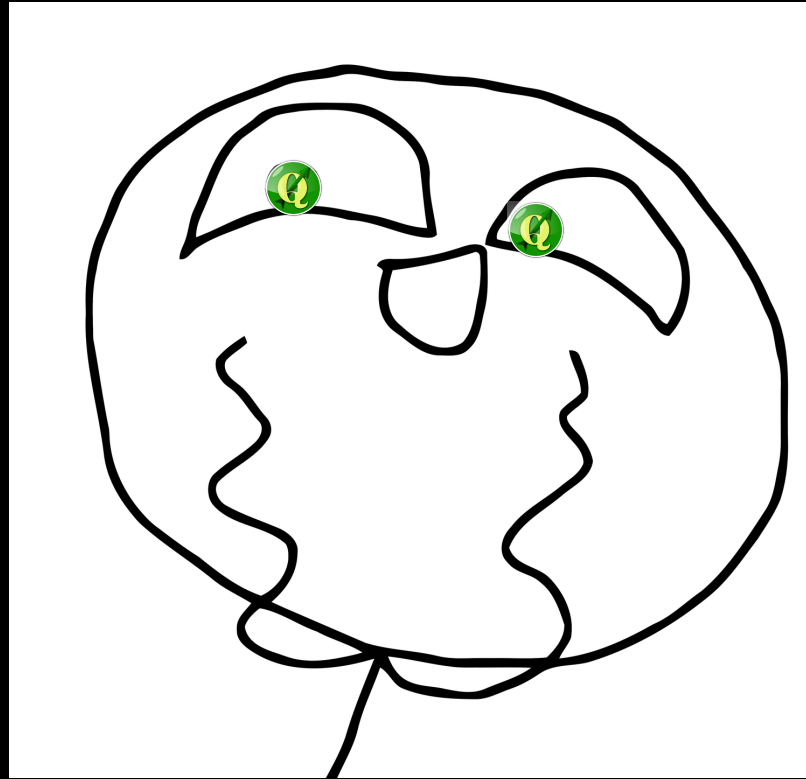QGIS Users Around the World

n.o. unique IP addresses
- < 100
- < 500
- < 1500
- < 5000
- > 5000

Data: IP addresses of users accessing QGIS contributed repository between Oct. 23 and Dec. 17, 2011, generated by Gary Sherman (http://spatialgalaxy.net/2011/12/19/qgis-users-around-the-world/)
Map: Anita Graser, 2011-12-25 (background map from Natural Earth)
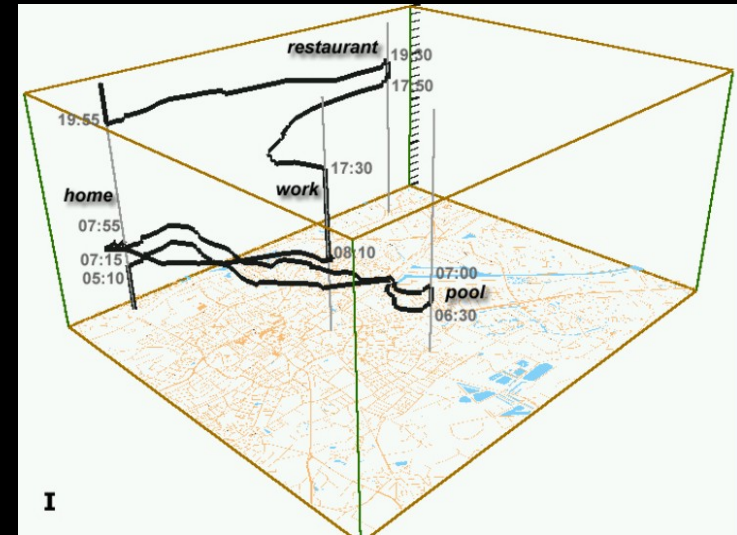
Please Support this Project and Donate!
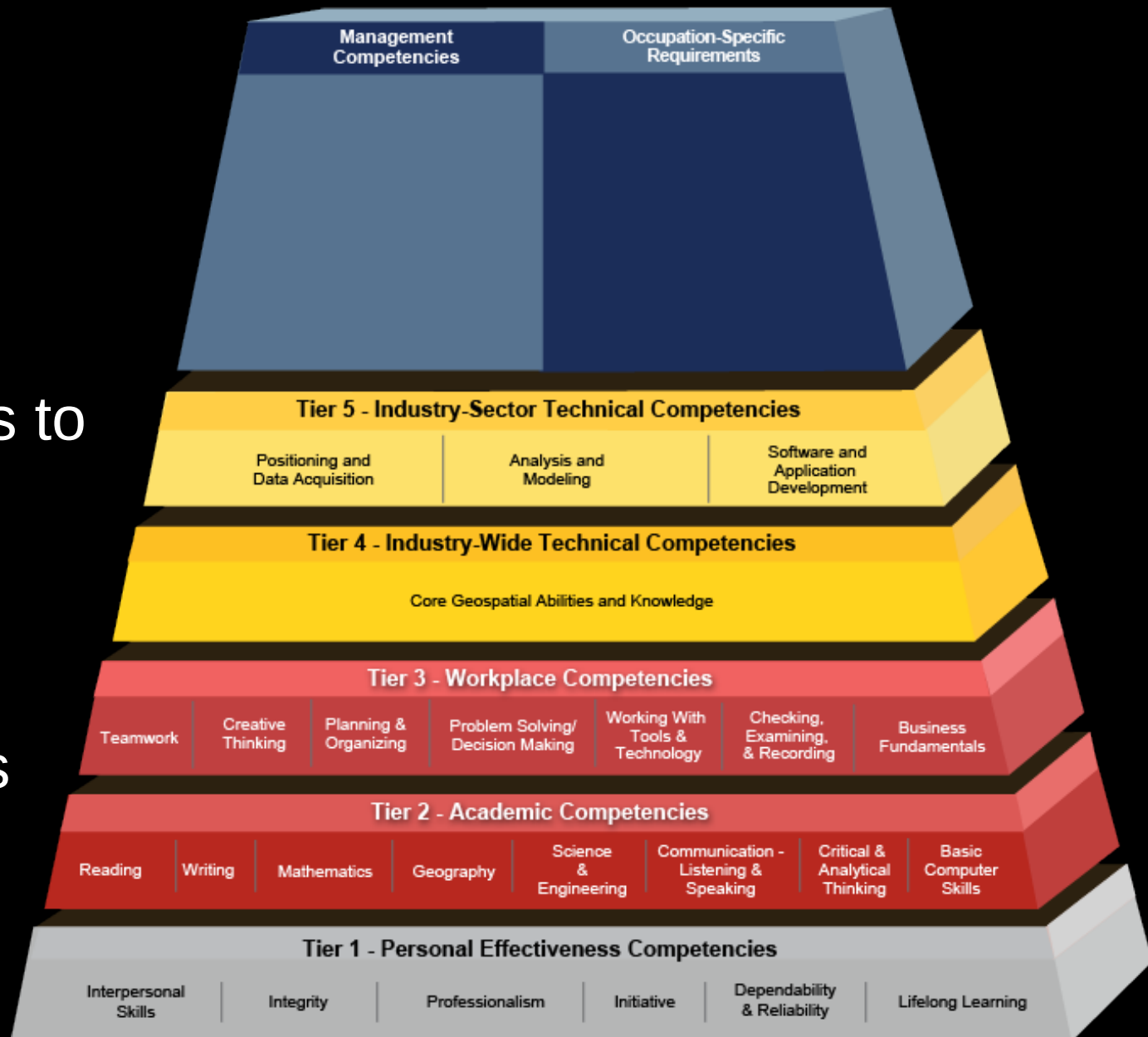
Concepts

- Geography
  - Space
  - Place
  - Scale
  - Time

- Why do you need Geography?
  - Spatial relationships
  - Spatial practices
  - Scalability of space and place
  - Mutual production of space/time

Concepts

- GIScience

  – Use of geospatial technologies to examine problems in human and physical geographies

Goals

- Basics
  - Download and Install
    - Windows, Mac, Linux
  - Start up and GUI
    - "Buttonology"
  - Plugins
    - OpenLayers, OpenGeo, Explorer, Processing, Plugin Builder, GeoSearch
    - Search, Update, Install

- Tools
  - Selection Tools
  - Density Map
  - Projection Tools
  - Resampling
  - GeoStats
- Vector Data and Analysis
- Raster Data and Analysis

Other Courses

- Introduction to Cartography
- WebGIS with OpenGeo Suite
- Python Programming with PyQGIS
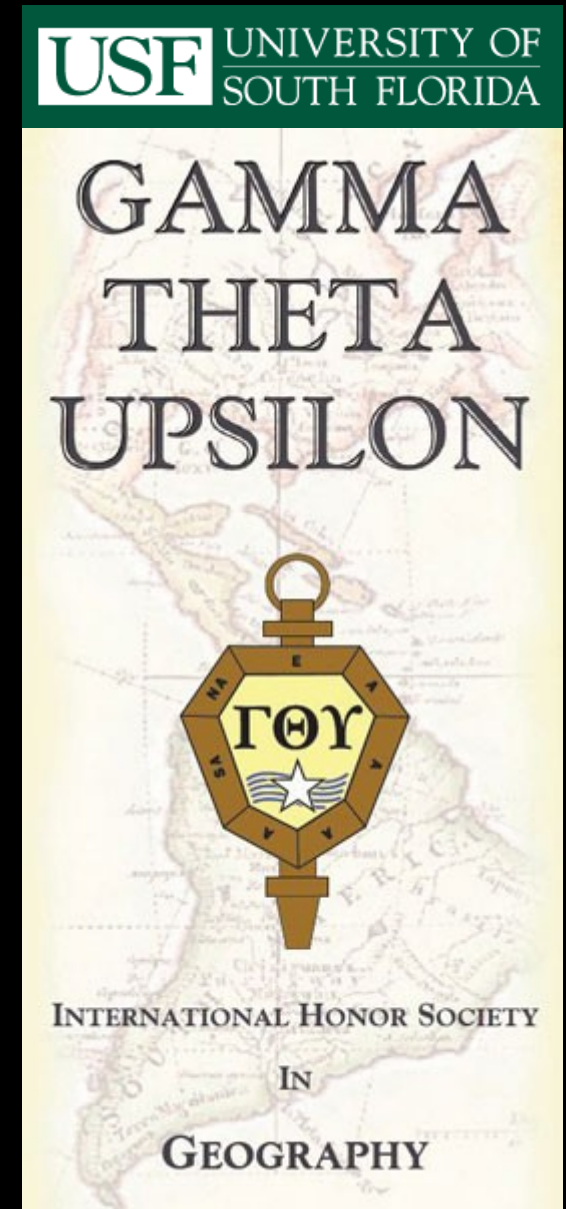- Remote Sensing for Hackers
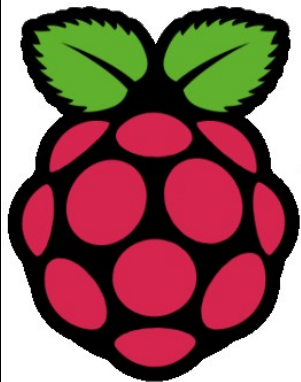
Resources

- USF School of Geosciences
  - http://hennarot.forest.usf.edu/main/depts/geosci/
  - If you're a USF student, take a course!
- USF GTU-KK
  - Eager Geo-minds wanting to do great things (link coming soon!)
- QGIS
  - http://www.qgis.org/en/docs/index.html
- Boundless
  - http://boundlessgeo.com/
- Python
  - https://www.python.org/

Resources

- R
  - https://www.r-project.org/
- Books
  - Thematic cartography and geovisualization (3rd ed) by Slocum, McMaster, Kessler,& Howard
  - Elements of cartography (6th ed) by Arthur H. Robinson
  - The PyQGIS Programmer's Guide: Extending QGIS with Python by Gary Sherman
- FOSS4G GeoAcademy
  - http://spatialquerylab.com/foss4g-academy-curriculum/
- ColorBrewer
  - http://colorbrewer2.org/flash/index.php
- TypeBrewer
  - http://typebrewer.org/

That's all folks!

Thanks!

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