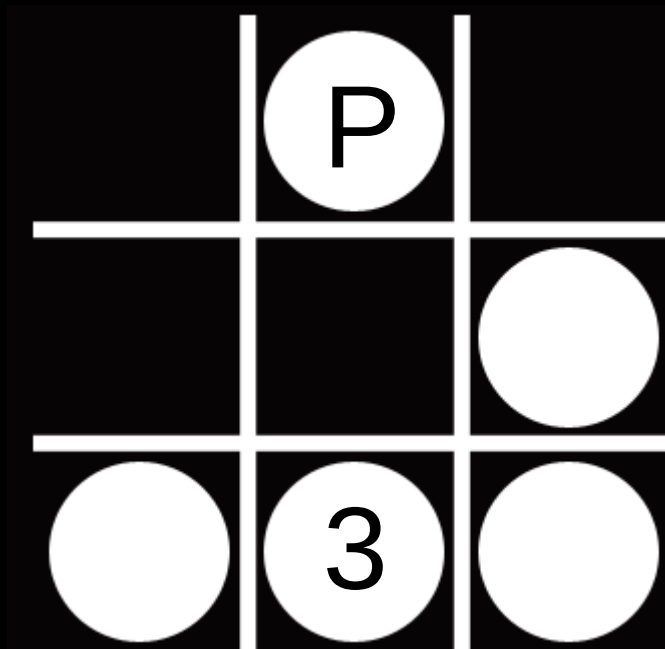# Geography for Hackers

Prepared by Joe Blankenship
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Agenda

What is OpenGeo Suite?

Concepts

Goals

Other Courses

Resources
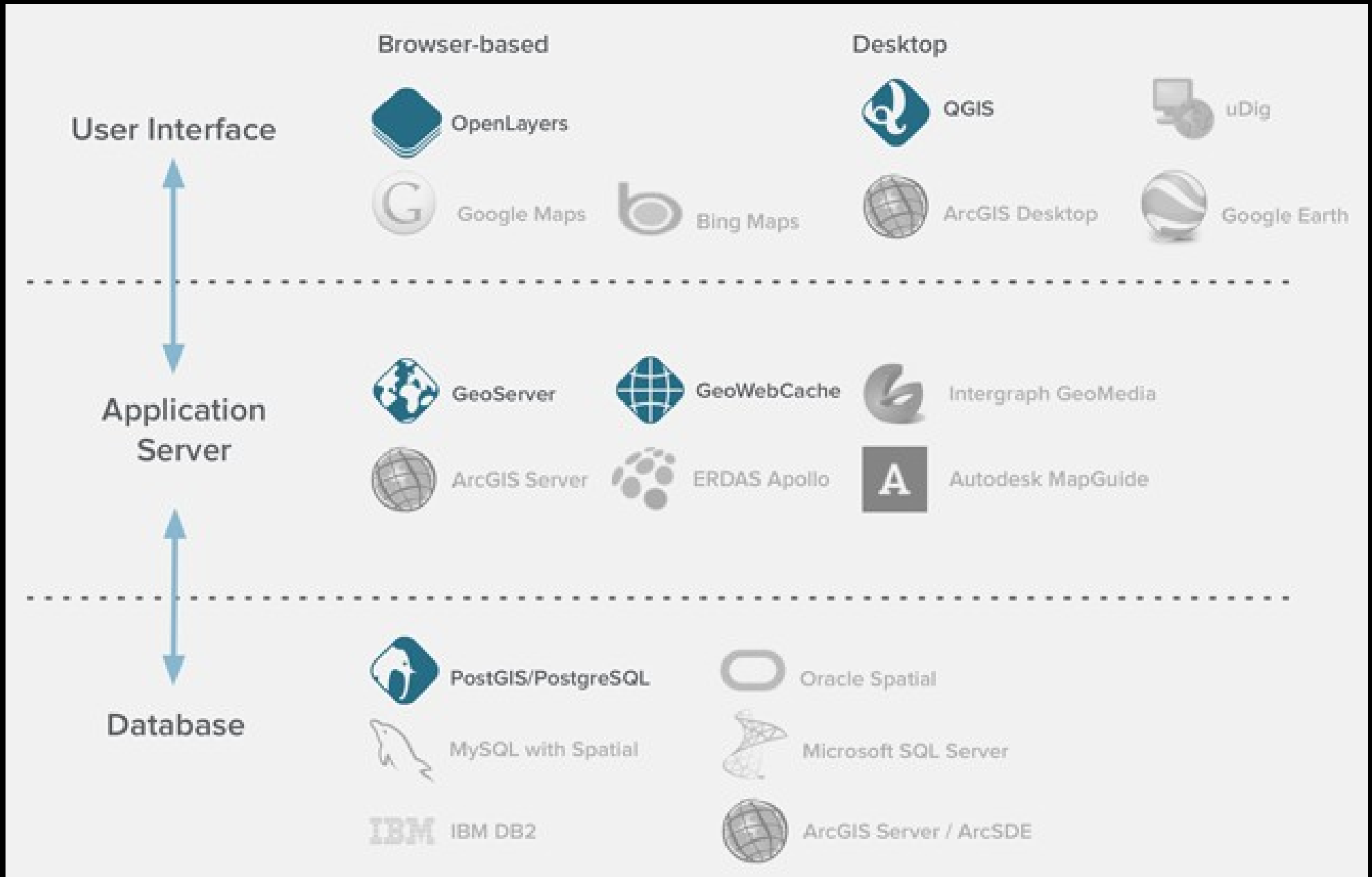
https://github.com/joeblankenship1

What is OpenGeo Suite?

- Suite built with Open Source Software

- Manage Data, Publish Maps, Build Apps, Analytic Tools

- PostGIS, GeoServer, GeoWebCache, OpenLayers, and More

- Web, Desktop, and Mobile

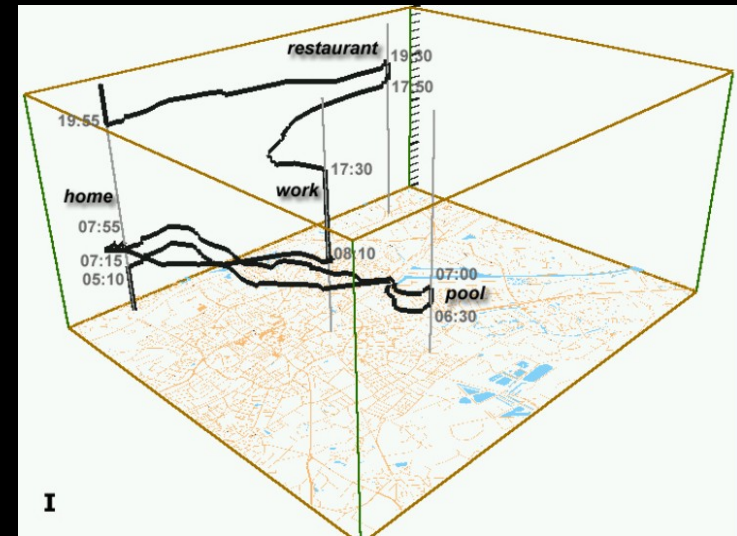- Cloud Instances (AWS, Azure)

What is OpenGeo Suite?

What is OpenGeo Suite?
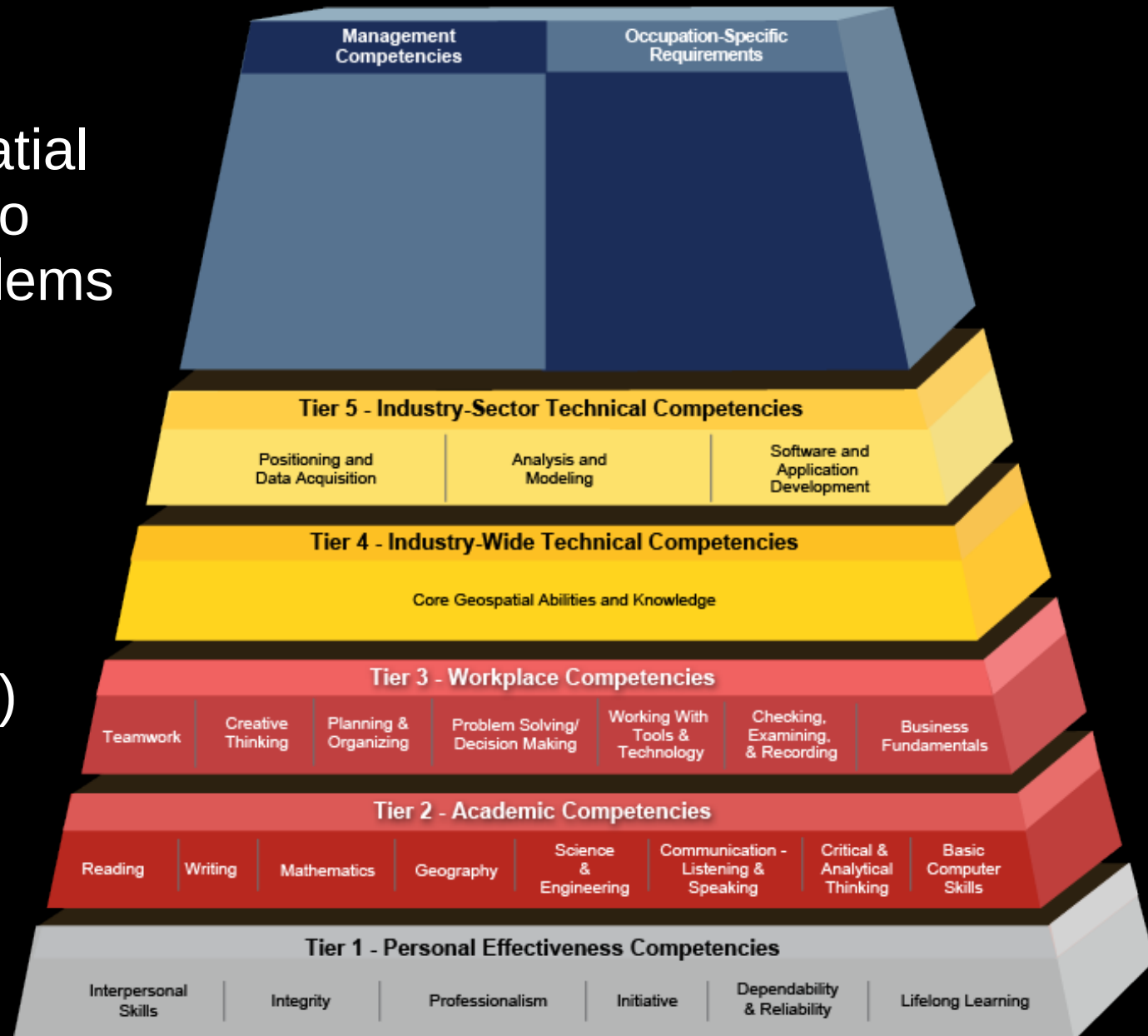
Concepts

- 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
  - Geographic Information Systems (GIS)
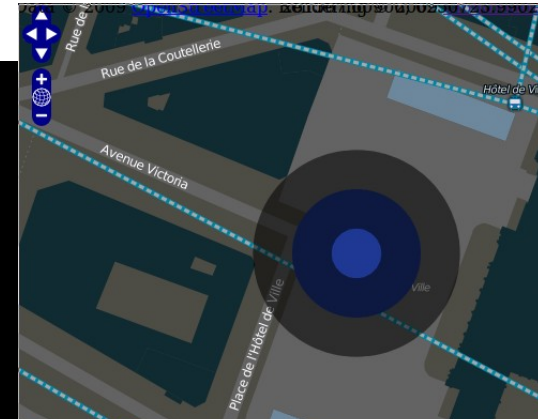
Goals

- Basics
  - Download and Install
    - Windows, Mac, Linux
    - VirtualBox
    - OpenGeo Suite
    - Optional
      - GeoNode
      - GeoGig
  - Start up and GUI
    - Bash (SSH, Putty)
    - Web Interface

- PostGIS
  - PostgreSQL
  - PGAdminIII
- GeoServer
  - Security
  - Data (QGIS, Raw)
  - Connections
  - Data Management
  - Group Policy
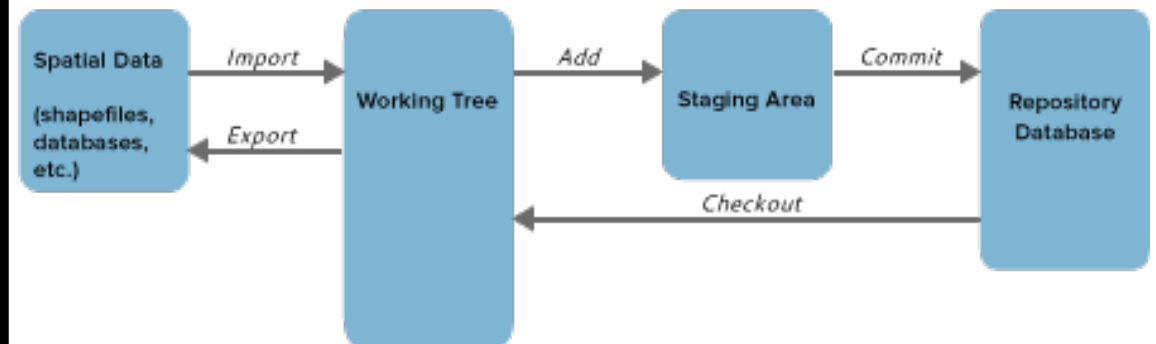
Goals

- GeoWebCache
  - Tiling Overview
- OpenLayers
  - Create Web Map
    - Data
    - Styling
    - Publication
  - URL Manipulation
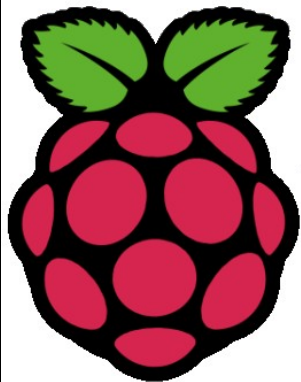 - GeoNode
- GeoGig
  - Versioning

Other Courses

- Introduction to Cartography
- Spatial Analysis with QGIS
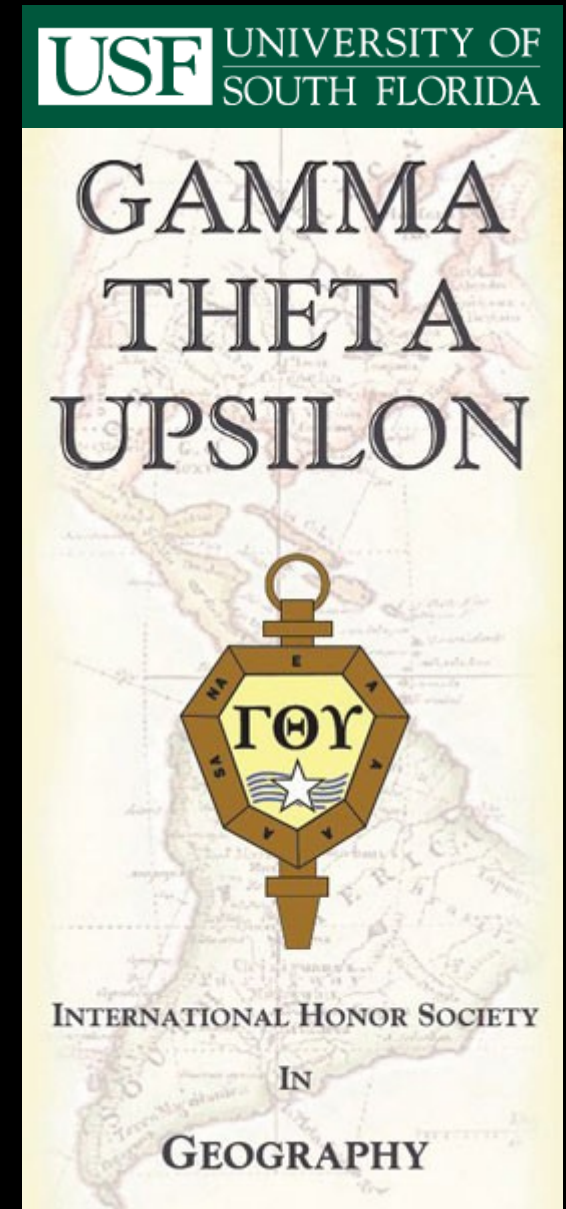- Python Programming with PyQGIS
- Remote Sensing for Hackers

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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