

Geography 12: Maps and Spatial Reasoning

Lecture 24: *Having Fun with Google Earth*

Professor Keith Clarke



"We are like an iPod for Earth images."

Michael T. Jones, Chief Technologist, Google Earth (Nov 2006)

Google Earth: A history

- Gore represented Tennessee in the US Senate, 1985-1992. VP 1993-2001. Served on Senate Select Committee on Intelligence
- Dayton Peace Agreement /Wright-Patterson Air Force Base, Ohio Dec 1995, ends war in Bosnia
- Google founded 1998
- Keyhole Earthviewer (2002) In-Q-tel funding, Dual use
- Google buys Keyhole (Oct. 2004)
- Google Maps/Local Feb. 8th 2005
- Google Earth (June 2005)
- Google Earth Community added (2005)
- Partnership with National Geographic (2006)
- 100 million downloads: Version 4 (Nov. 2006)



In-Q-Tel (Created 1999)

"The (Senate Select Committee on Intelligence) encourages a symbiotic relationship between the Intelligence Community and the private sector using innovative approaches, such as the CIA's In-Q-Tel. In-Q-Tel is a venture capital fund, largely funded by the US Intelligence Community, to stimulate new technologies through private sector entrepreneurs. It shows great promise." Comments by Senator Graham, Chairman of the Senate Select Committee on Intelligence, introducing the Intelligence Authorization Act for Fiscal Year 2002

Google Earth Today

- Google Earth viewer downloadable free
- Google Earth Plus is an optional upgrade adding GPS device support, the ability to import spreadsheets, drawing tools and better printing. (\$20)
- For professional and commercial uses, Google Earth Pro “the ultimate research, presentation and collaboration tool for location information.” (\$400)

Google Maps Mobile

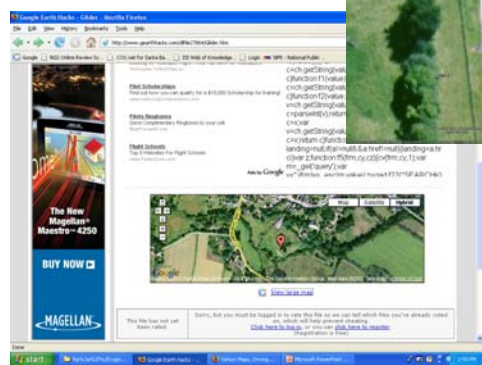
- **Real-time traffic** 30 major US cities.
- **Detailed directions**
- **Integrated search results**
- **Easily movable maps**
- **Satellite imagery**



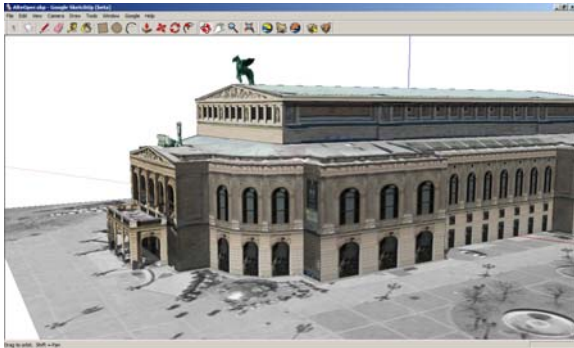
Google Earth Mania



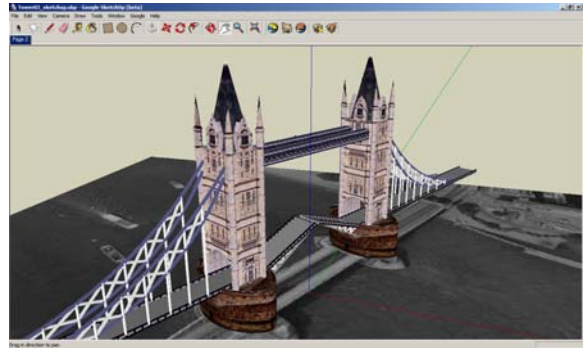
A glider



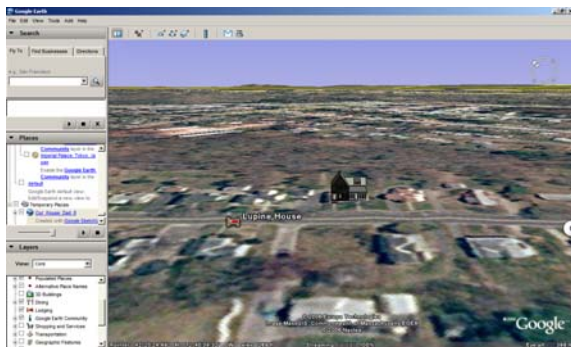
Google SketchUp Model of the Alte Oper, Frankfurt



Tower Bridge by Rene Almere



177 N Main St- Model of house in Florence, MA



Basic KML

```
<?xml version="1.0" encoding="UTF-8"?>
<kml xmlns="http://earth.google.com/kml/2.2">
  <Placemark>
    <name>Simple placemark</name>
    <description>Attached to the ground. Intelligently
places itself at the height of the underlying
terrain.</description>
    <Point>
      <coordinates>
        -122.0822035425683,37.42228990140251,0
      </coordinates>
    </Point>
  </Placemark> </kml>
```

Google Earth Blog

http://www.gearthblog.com/blog/archives/2007/08/rc_planes_and_camera.html

<http://www.gearthhacks.com/forums/downloads.php?do=file&act=down&id=27669>

<http://www.googleearthcoolplaces.com/>

http://www.googleearthcoolplaces.com/kmz/climbers_on_everest.kmz

<http://www.googleearthcoolplaces.com/kmz/stonehenge.kmz>

http://www.googleearthcoolplaces.com/kmz/eiffel_tower_vegas.kmz

<http://bbs.keyhole.com/ubb/showthreaded.php/Number/236352>