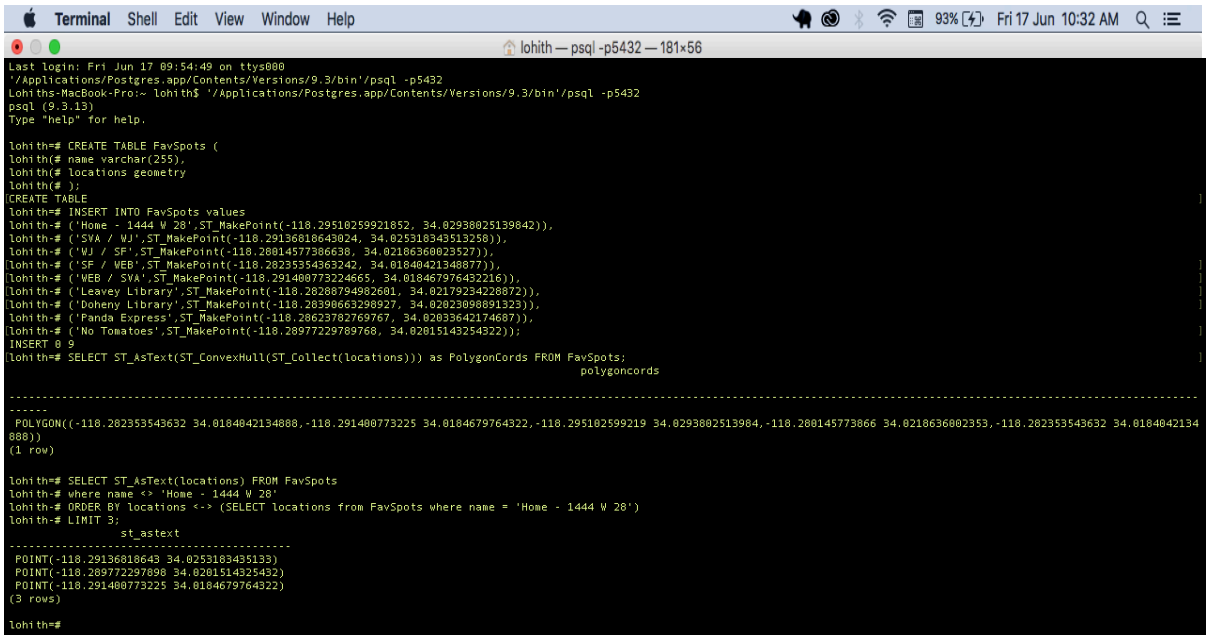
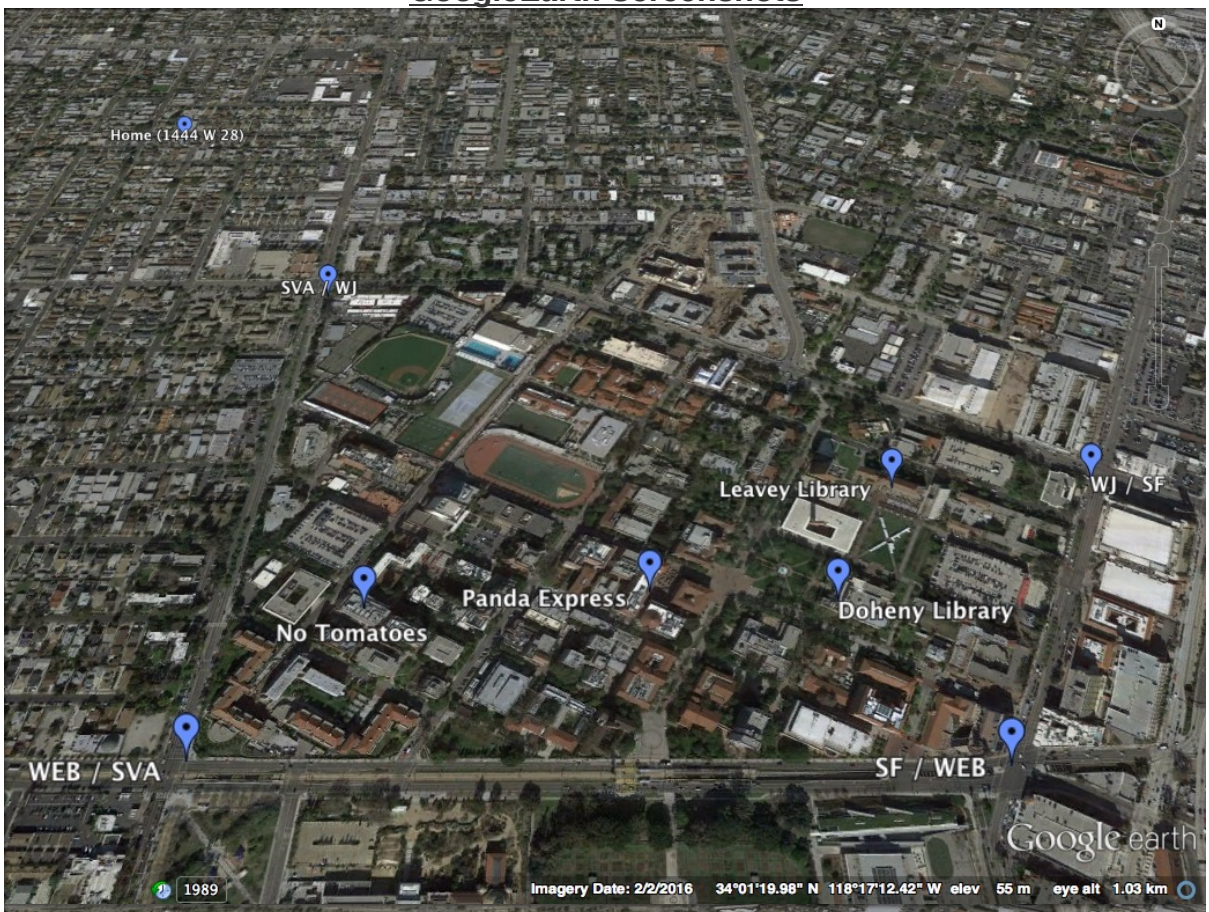
CS585: Assignment – 2 (Summer 2016)

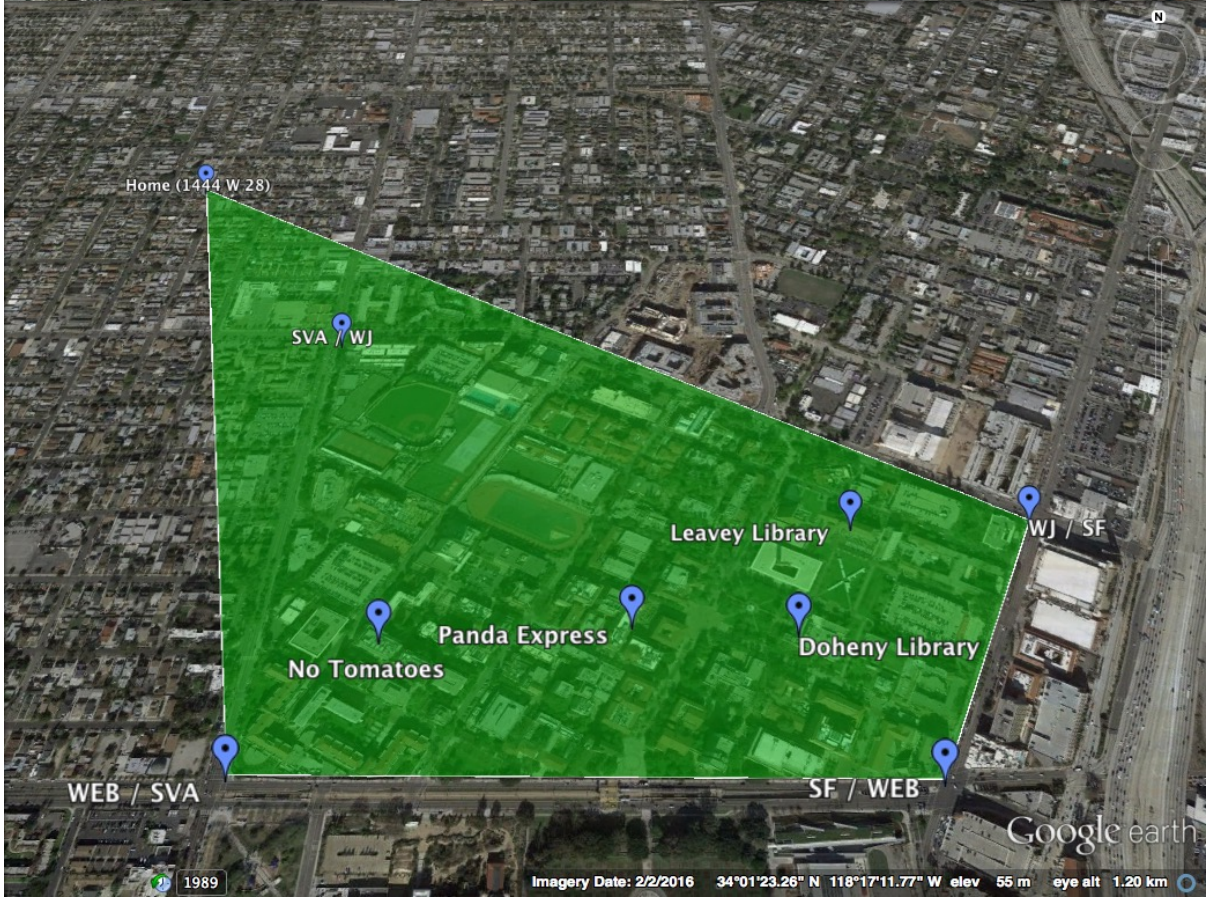
USC ID: 8299-5642-86 | Email: paripati@usc.edu
Name: Lohith Paripati

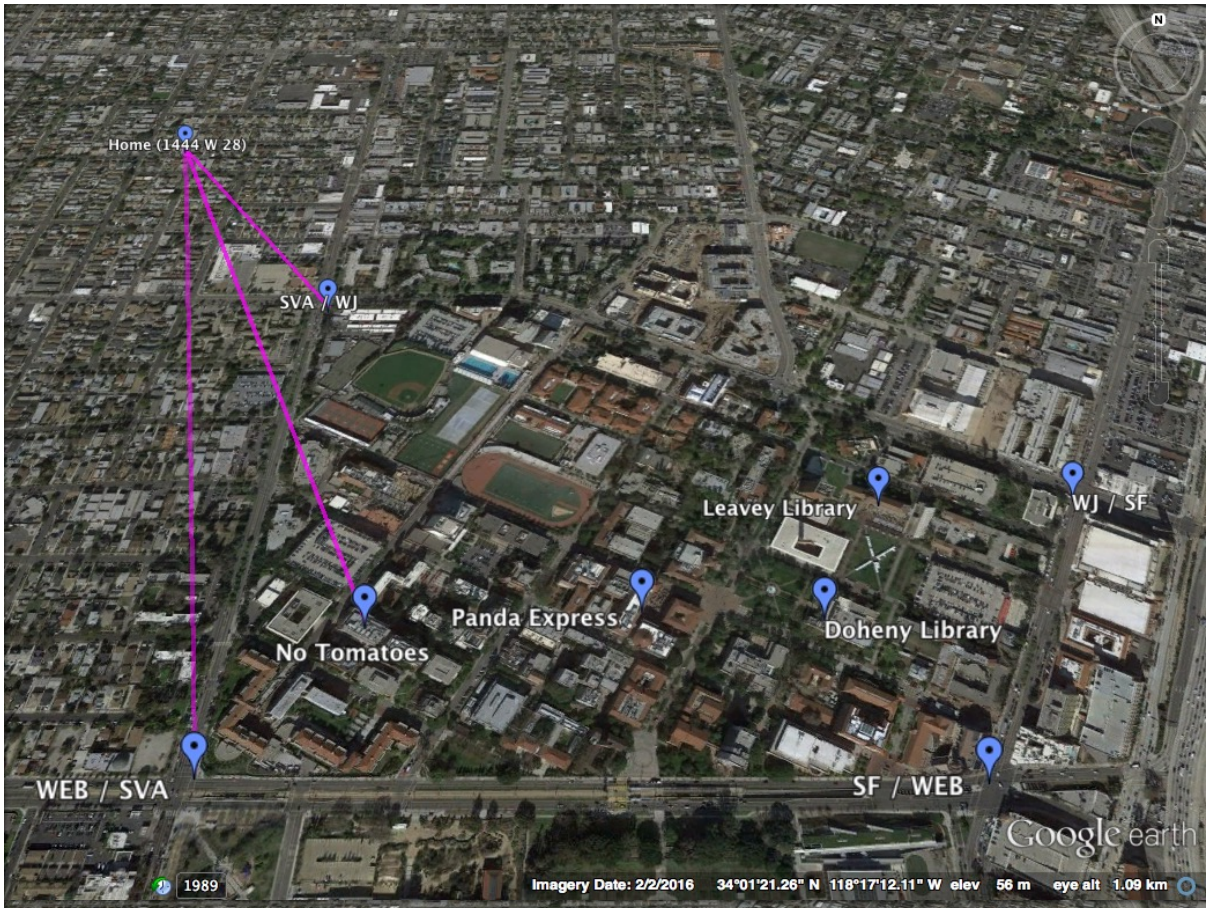
```
CREATE EXTENSION postgis;

CREATE TABLE FavSpots (
name varchar(255),
locations geometry
);

INSERT INTO FavSpots values
('Home - 1444 W 28',ST_MakePoint(-118.29510259921852, 34.02938025139842)),
('SVA / WJ',ST_MakePoint(-118.29136818643024, 34.025318343513258)),
('WJ / SF',ST_MakePoint(-118.28014577386638, 34.02186360023527)),
('SF / WEB',ST_MakePoint(-118.28235354363242, 34.01840421348877)),
('WEB / SVA',ST_MakePoint(-118.291400773224665, 34.018467976432216)),
('Leavey Library',ST_MakePoint(-118.28288794982601, 34.02179234228872)),
('Doheny Library',ST_MakePoint(-118.28390663298927, 34.02023098891323)),
('Panda Express',ST_MakePoint(-118.28623782769767, 34.02033642174687)),
('No Tomatoes',ST_MakePoint(-118.28977229789768, 34.02015143254322));

SELECT ST_AsText(ST_ConvexHull(ST_Collect(locations))) as PolygonCords FROM FavSpots;

SELECT ST_AsText(locations) FROM FavSpots
where name <> 'Home - 1444 W 28'
ORDER BY locations <-> (SELECT locations from FavSpots where name = 'Home - 1444 W 28')
LIMIT 3;
```

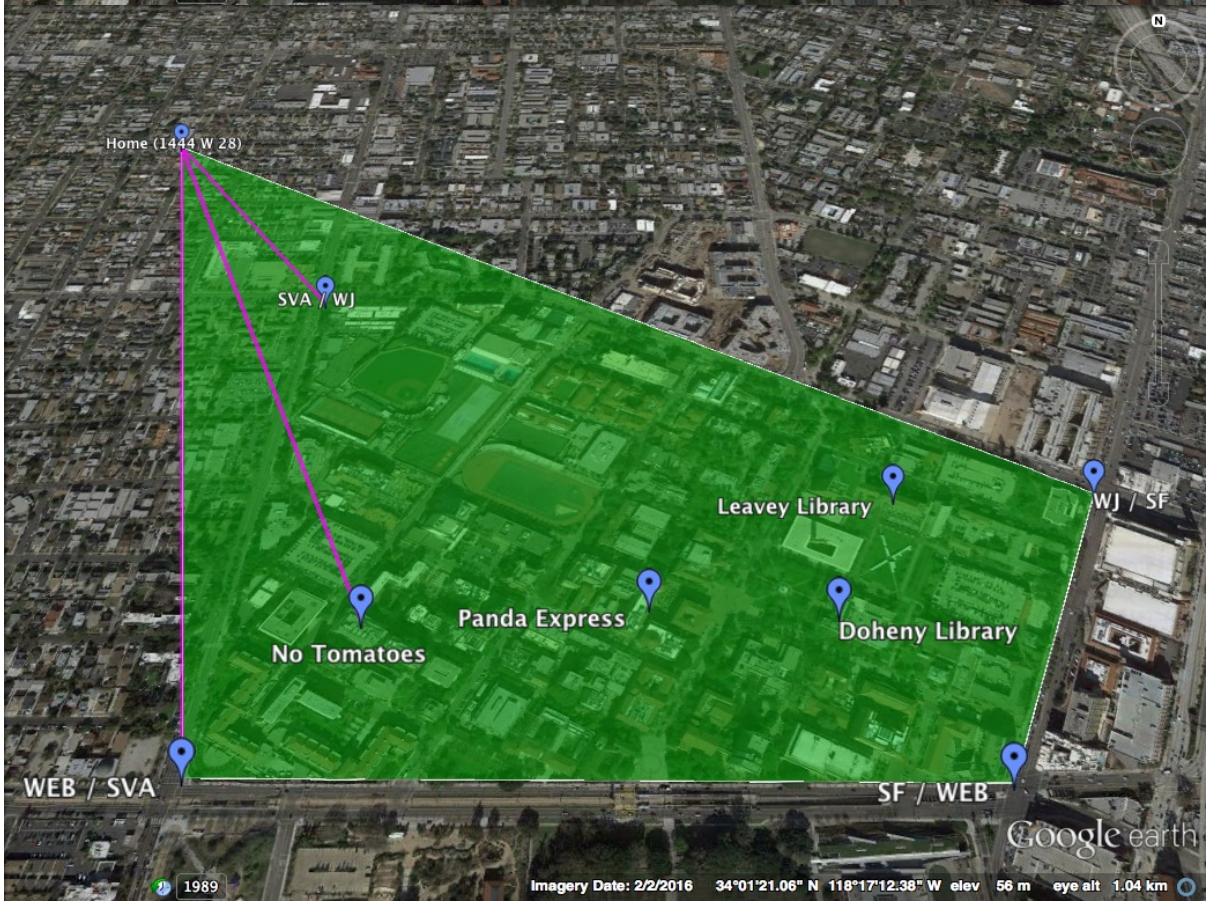


GoogleEarth Screenshots






Home (1444 W 28)
SVA / WJ
Leavey Library
WJ / SF
Panda Express
Doheny Library
No Tomatoes
WEB / SVA
SF / WEB
Google earth
1989
Imagery Date: 2/2/2016 34°01'21.26" N 118°17'12.11" W elev 56 m eye alt 1.09 km


Home (1444 W 28)
SVA / WJ
Leavey Library
WJ / SF
Panda Express
Doheny Library
No Tomatoes
WEB / SVA
SF / WEB
Google earth
1989
Imagery Date: 2/2/2016 34°01'21.06" N 118°17'12.38" W elev 56 m eye alt 1.04 km

Keyhole Markup Language (KML file)


```
<?xml version="1.0" encoding="UTF-8"?>
<kml xmlns="http://earth.google.com/kml/2.0">
<Document>
<Style id="z1">
<IconStyle><Icon><href>http://www.google.com/intl/en_us/mapfiles/ms/micons/blue-dot.png</href></Icon></IconStyle>
</Style>st)
<Placemark><name>Home (1444 W 28)</name>
<styleUrl>#z1</styleUrl><Point><coordinates>-118.29510259921852, 34.02938025139842</coordinates></Point>
</Placemark>
<Placemark><name>SVA / WJ</name>
<styleUrl>#z1</styleUrl><Point><coordinates>-118.29136818643024, 34.025318343513258</coordinates></Point>
</Placemark>
<Placemark><name>WJ / SF</name>
<styleUrl>#z1</styleUrl><Point><coordinates>-118.28014577386638, 34.02186360023527</coordinates></Point>
</Placemark>
<Placemark><name>SF / WEB</name>
<styleUrl>#z1</styleUrl><Point><coordinates>-118.28235354363242, 34.01840421348877</coordinates></Point>
</Placemark>
<Placemark><name>WEB / SVA</name>
<styleUrl>#z1</styleUrl><Point><coordinates>-118.29140077322466, 34.018467976432216</coordinates></Point>
</Placemark>
<Placemark><name>Leavey Library</name>
<styleUrl>#z1</styleUrl><Point><coordinates>-118.28288794982601, 34.02179234228872</coordinates></Point>
</Placemark>
<Placemark><name>Doheny Library</name>
<styleUrl>#z1</styleUrl><Point><coordinates>-118.28390663298927, 34.02023098891323</coordinates></Point>
</Placemark>
<Placemark><name>Panda Express</name>
<styleUrl>#z1</styleUrl><Point><coordinates>-118.28623782769767, 34.02033642174687</coordinates></Point>
</Placemark>
<Placemark><name>No Tomatoes</name>
<styleUrl>#z1</styleUrl><Point><coordinates>-118.28977229789768, 34.02015143254322</coordinates></Point>
</Placemark>

<Style id="transGreenPoly">
    <LineStyle>
      <width>1.5</width>
    </LineStyle>
    <PolyStyle>
      <color>7d00ff00</color>
    </PolyStyle>
</Style>

<Placemark>
```

```
    <styleUrl>#transGreenPoly</styleUrl>
    <Polygon>
      <extrude>1</extrude>
      <outerBoundaryIs>
        <LinearRing>
          <coordinates>
                                -118.282353543632,34.0184042134888
                                -118.291400773225,34.0184679764322
                                -118.295102599219,34.0293802513984
                                -118.280145773866,34.0218636002353
                                -118.282353543632,34.0184042134888
                    </coordinates>
        </LinearRing>
      </outerBoundaryIs>
    </Polygon>
</Placemark>


<Style id="transPurpleLineGreenPoly">
  <LineStyle>
    <color>7fff00ff</color>
    <width>4</width>
  </LineStyle>
  <PolyStyle>
    <color>7f00ff00</color>
  </PolyStyle>
</Style>

<Placemark>
     <name>Absolute</name>
     <styleUrl>#transPurpleLineGreenPoly</styleUrl>
     <LineString>
       <extrude>1</extrude>
       <tessellate>1</tessellate>
       <coordinates>
                               -118.29510259921852,34.02938025139842 -118.29136818643,34.0253183435133
                               -118.29510259921852,34.02938025139842 -118.289772297898,34.0201514325432
                               -118.29510259921852,34.02938025139842 -118.291400773225,34.0184679764322
       </coordinates>
     </LineString>

</Placemark>

</Document>
</kml>
```