

geodjango

Web Applications for (Neo) Geographers with Deadlines

May 14, 2008

Where 2.0

Justin Bronn

CartoAnalytics

Why?

Commoditization

Abstraction

Rapid Development



Why?



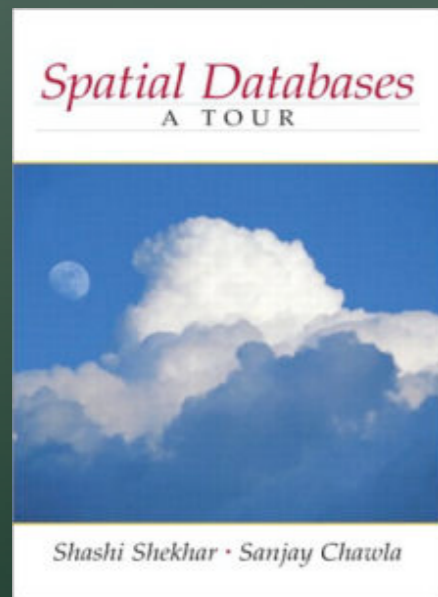
**80% of enterprise data
has a spatial component**



- Unknown



**spatial data tends to
be highly self-
correlated**



- Shashi Shekhar & Sanjay Chawla



**near things are more
related than distant
things**



**A COMPUTER MOVIE SIMULATING URBAN
GROWTH IN THE DETROIT REGION**

**ECONOMIC
GEOGRAPHY**

- W. R. Tobler (1970)

Houston Crime Maps

A free browsable database of Houston crimes.

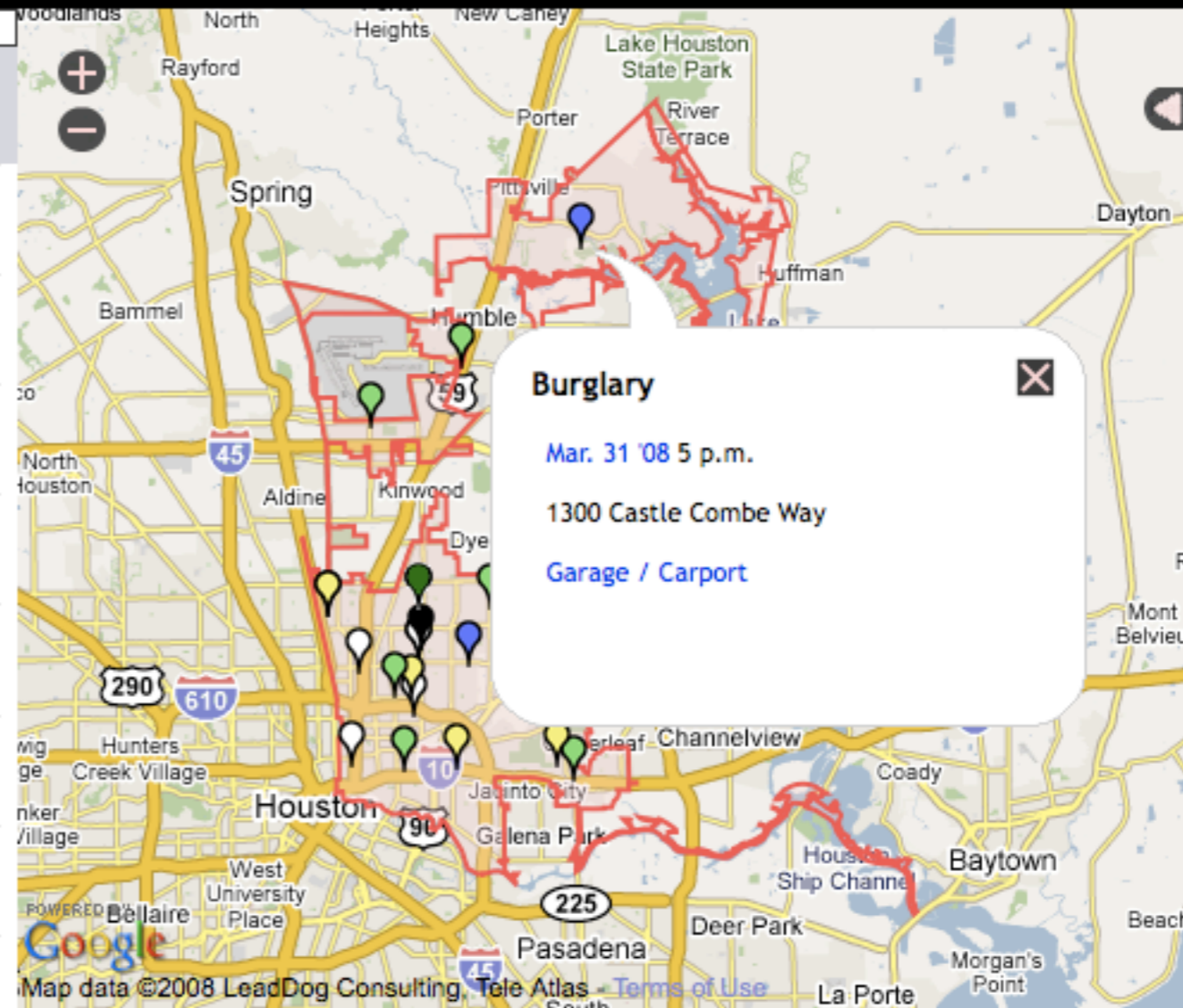
Browse by: [Offense](#) [Neighborhood](#) [Date](#) [District](#) [Beat](#) [ZIP Code](#) [Premise](#)

[Home](#) » [District](#) » [Northeast](#)

Latest Crimes in Northeast (1-20)

51,477 Total Crimes

- Mar. 31 '08 [Narcotic Drug Laws](#)
11:50 p.m. 7000 E Crosstimbers
- Mar. 31 '08 [Burglary Of A Motor Vehicle](#)
11:39 p.m. 18000 Eastex Fwy
- Mar. 31 '08 [Narcotic Drug Laws](#)
10:53 p.m. 1900 Jensen Dr
- Mar. 31 '08 [Narcotic Drug Laws](#)
7:44 p.m. 7000 Weaver Rd
- Mar. 31 '08 [Narcotic Drug Laws](#)
7:30 p.m. 4800 Majestic
- Mar. 31 '08 [Burglary Of A Motor Vehicle](#)
7 p.m. 9900 Mesa Dr
- Mar. 31 '08 [Burglary](#)
5 p.m. 1300 Castle Combe Way
- Mar. 31 '08 [Aggravated Assault](#)
4:30 p.m. 5600 Kelley
- Mar. 31 '08 [Robbery](#)
4:20 p.m. 8200 Homestead Rd



Prev 20

Next 20



Commmoditization

Operating Systems



Databases

PostgreSQL ORACLE[®]

SYBASE



DB2. software

Microsoft[®]
SQL Server[™]



MySQL[®]

Informix



Abstraction

MTV

- Models
- Templates
- Views

OpenLayers

KML

GML

WKT

GeoJSON

GeoRSS

geodjango



GEOS



ORACLE®



PROJ.4



Rapid Development

```
Neighborhood.objects.filter(poly__intersects=zipcode.mpoly) |  
    Neighborhood.objects.filter(poly__within=district.mpoly)
```

```
        SELECT "houston_neighborhood"."id",  
"houston_neighborhood"."name", "houston_neighborhood"."poly"  
        FROM "houston_neighborhood" WHERE  
        (ST_Intersects("houston_neighborhood"."poly",  
ST_Transform(ST_GeomFromWKB('\\\\001\\\\006\\\\000\\ ... ', 4269),  
32140)) OR ST_Within("houston_neighborhood"."poly",  
ST_GeomFromWKB('\\\\001\\\\006\\\\000 ... ', 32140))
```

Harness Spatial Data