

# Geographic and News APIs

Jason Clark  
Head of Digital Access and Web Services  
Montana State University Libraries

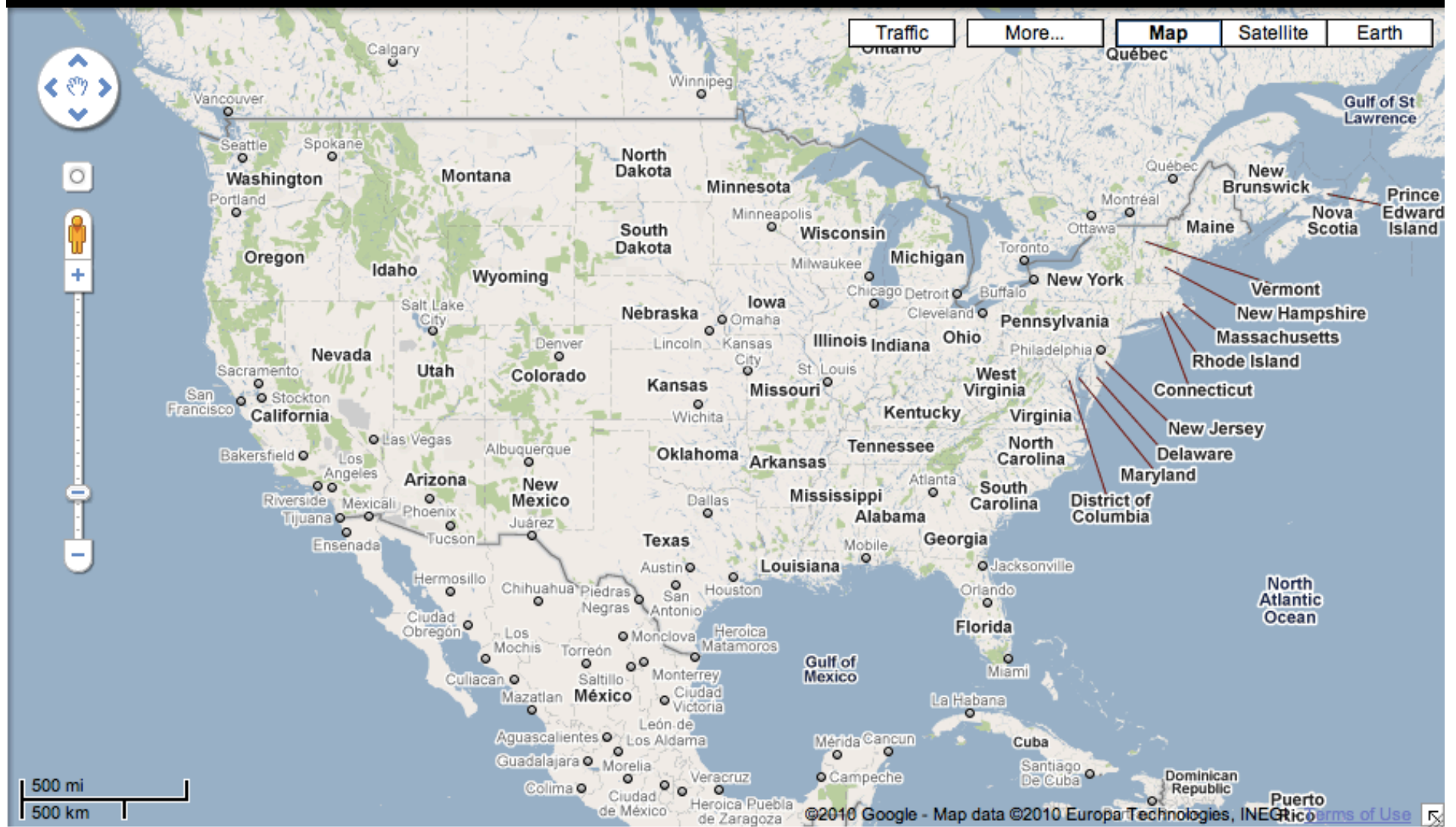
November 16, 2010

pinboard.in #tag

pinboard.in/u:jasonclark/t:lita-class-geonews

# Overview

- Does location matter?
- How does news integrate?
- Library Apps and Demos
- Getting Started
- Questions



Look familiar?

~~“Content is King”~~

What?

“Context is King”

For Real?

“About half of the queries  
on Google have a  
geographic component.”

Source: Andrew Foster, product manager at Google  
<http://www.guardian.co.uk/technology/2010/jun/16/google-maps-property-finder>



# Yellowstone Park

## General information

[United States](#)

## Animals you might see

[American Badger](#)

[American Beaver](#)

[American Bison](#)

[American black bear](#)

[Brown Bear](#)

[Coyote](#)

### Have you been here?

Tell us which animals you saw.

I saw a

[Search](#)

## Average rating

Based on ratings of 1 trip by 1 spotter.

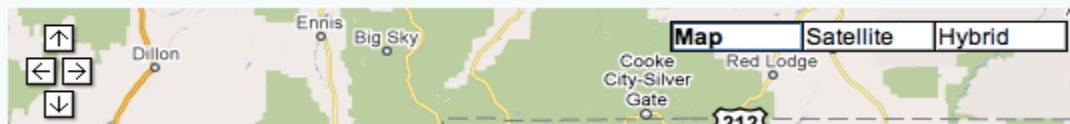


Have you been here? Why not [add your trip?](#)



Have we got our facts right? [Suggest changes](#) to our information

## Photos





# Library Applications

- Mapping Data
- Check-in Services
- Crowdsourcing Geo Information
- Local Interest Apps

# Mapping Data

- Montana State University Research Locations
- TAMU Geological Atlas, United States
  - <http://repository.tamu.edu/handle/1969.1/2490>

Geography becomes a browse point

Location is a metric for  
interest.

Can libraries apply this?



# Local Interest Apps

- NCSU Wolf Walk
- San Jose Public Library
  - Augmented Reality Historical Walking Tours  
(in development... )

Location-based Learning Opportunities

## WolfWalk

### Explore NC State history right on your phone

WolfWalk allows you to explore North Carolina State University's campus history on your phone. WolfWalk has information on 90 different sites on campus, with images that trace the site's history, courtesy of the [NCSU Libraries Special Collections Research Center](#). WolfWalk will also show you information about the sites closest to you, depending on the capabilities of your phone.



Get WolfWalk  
for iPhone



Visit WolfWalk  
Mobile Web

### Send WolfWalk to my phone

Select provider... ▾

999-999-9999

Send Text Message

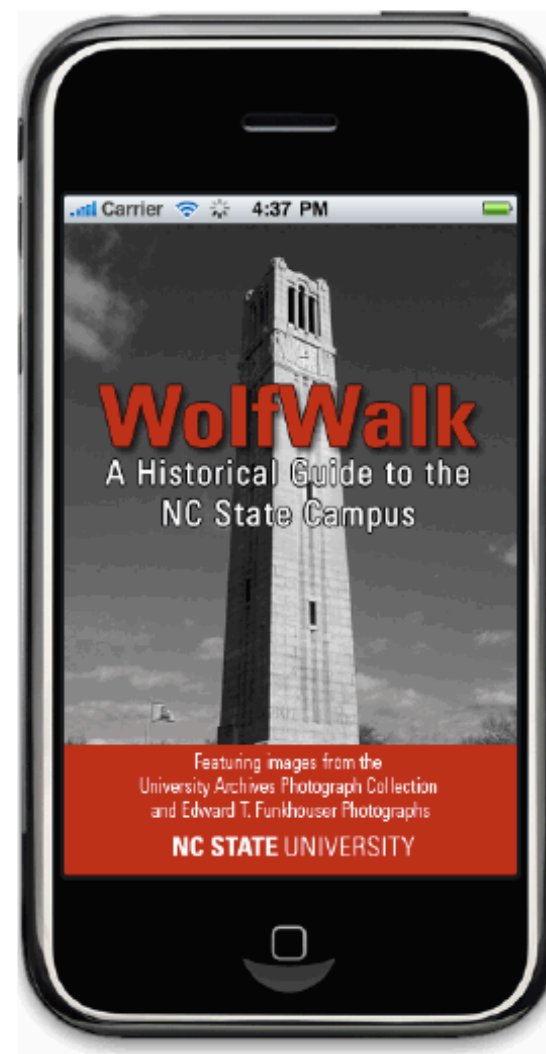
We will not store or share your number. Sending messages is free, but your mobile provider may charge you to receive messages. Please check with your provider for details.

### Need support? Have a suggestion for us?

If you have any questions about WolfWalk or have suggestions for us, send a message to [wolfwalk@lists.ncsu.edu](mailto:wolfwalk@lists.ncsu.edu).

### Explore more NC State history

To find out more about NC State's history, visit [Historical State](#). Historical State is the home of our comprehensive catalog of historical images of NC State, and contains all of the images used in WolfWalk. Historical State also features course catalogs, and a near-complete run of the *Agromeck*, NC State's yearbook.



<http://www.lib.ncsu.edu/wolfwalk/>

Currency can make  
relevancy.

How can libraries use news APIs?

# Library Applications

- Journal Data Feeds
- Current Events – News Services
- Giving Voices to Books
- Bestseller Info



**LIBRARIES**

Home Books Articles Journalist Help Site Search

Select a Journal:

SIAM Journal on Applied Mathematics  
SIAM Journal on Control and Optimization  
SIAM Journal on Numerical Analysis  
SIAM Journal on Scientific Computing  
SIAM Review  
Journal of Computational Physics  
Journal of Theoretical Biology  
Physical Review Letters  
Physics of Fluids  
Journal of Mathematical Biology  
Bulletin of Mathematical Biology  
Journal of Differential Equations

more journals...

**Journalist**

SIAM Journal on Applied Mathematics  
SIAM Journal on Control and Optimization  
SIAM Journal on Numerical Analysis  
SIAM Journal on Scientific Computing  
SIAM Review  
Journal of Computational Physics  
Journal of Theoretical Biology  
Physical Review Letters  
Physics of Fluids  
Journal of Mathematical Biology  
Bulletin of Mathematical Biology  
Journal of Differential Equations

**Applied Mathematics Journals: Current Table of Contents**

**Journal of Mathematical Biology**

[A general model for the dynamics of cell volume, global stability, and optimal control](#)  
[Household epidemic models with varying infection response](#)  
[Design of regulation and dynamics in simple biochemical pathways](#)  
[Consequences of fluctuating group size for the evolution of cooperation](#)  
[Modeling the formation of in vitro filopodia](#)  
[A model of host response to a multi-stage pathogen](#)  
[Parameter estimation with a novel gradient-based optimization method for biological lattice-gas cellular automaton models](#)  
[Global analysis on delay epidemiological dynamic models with nonlinear incidence](#)  
[Mathematical modeling of cancer cell invasion of tissue: biological insight from mathematical analysis and computational simulation](#)  
[Public goods games with reward in finite populations](#)  
[Phylogeny, genealogy and the Linnaean hierarchy: a logical analysis](#)  
[Species abundance distributions in neutral models with immigration or mutation and general lifetimes](#)  
[Calculations for multi-type age-dependent binary branching processes](#)  
[Large mass self-similar solutions of the parabolic-parabolic Keller-Segel model of chemotaxis](#)  
[Global dynamics of hematopoietic stem cells and differentiated cells in a chronic myeloid leukemia model](#)  
[Expansion or extinction: deterministic and stochastic two-patch models with Allee effects](#)  
[On the determination of evolutionary outcomes directly from the population dynamics of the resident](#)  
[A discrete time neural network model with spiking neurons: II: Dynamics with noise](#)  
[Identifying the rooted species tree from the distribution of unrooted gene trees under the coalescent](#)  
[Approximations for the hitchhiking effect caused by the evolution of antimalarial-drug resistance](#)  
[Bistability in two-locus models with selection, mutation, and recombination](#)  
[Genealogy with seasonality, the basic reproduction number, and the influenza pandemic](#)  
[Effective shear viscosity and dynamics of suspensions of micro-swimmers from small to moderate concentrations](#)  
[Derivation, identification and validation of a computational model of a novel synthetic regulatory network in yeast](#)  
[Persistence in fluctuating environments](#)

<http://www.lib.montana.edu/toc/appmath/>

# Search NY Times: Movie Reviews API: MSU Libraries

(WORKING CODE AND PROOF OF CONCEPTS)

Demo App

What is this?

View Code



<http://api.nytimes.com/svc/movies/v2/reviews/search.json?api-key=fce4b493e272eb06faad691e6adb744%3A14%3A61089163&query=big+lebowski>

Results of your search for **big lebowski** (Showing 161 out of a possible 161 matches)

1. [The Big Lebowski](#)

*Short summary not available.*

Opened on 1998-03-06.

Rated: No rating available.

2. [Notorious](#)

*Anyone looking for a dispassionate, evenhanded account of the life of Biggie Smalls will be disappointed, perhaps even dismayed, by "Notorious."*

Opened on 2009-01-16.

Rated: No rating available.

3. [Big Fan](#)

*"Big Fan" is a spasmodically funny and bleak story about the love that speaks its name.*

Opened on 2009-08-28.

Rated: No rating available.

4. [The Big Shot-Caller](#)

*"The Big Shot-Caller," a minuscule indie variation of "Saturday Night Fever," moves only in fits and starts.*

Opened on 2009-05-15.

Rated: NR

<http://www.lib.montana.edu/~jason/files/nytimes-movies/>

# Demos and Code Samples

- Google Ajax Search API
- Foursquare and Google Maps KML
- Google Maps API - Local Libraries (XML)
- Google Streetview Widget
- HTML5 Geolocation
- Journal Table of Contents (Google Feed API)
- Mobile News Feed (Google Feed API)
- New Yorker Fiction Podcast Mashup
- NY Times Bestsellers List
- BooksNStuffNearby

# Geolocation (options)

- w3c Geolocation API
  - accurate
  - supported in Firefox 3.6, Safari 4
  - Javascript functionality
- Yahoo Query Language Location Tables
  - Web Services, REST API
  - Server-side and/or Client-side scripting

These are just two of the options...

# Getting Started

- Choose data with location interest
- Record latitude/longitude
- “Reverse Geocode” to get text values
  - <http://code.google.com/apis/maps/documentation/geocoding/#ReverseGeocoding>
- Find current or timely data
- Present in context

# BooksnStuffNearby

A Beta App

<http://www.google.com/search?q=jason+clark+code>

# YQL Location Tables API, Worldcat Search API, OpenLibrary API

Building blocks for a service

# Questions?

[twitter.com/jaclark](https://twitter.com/jaclark)

[jaclark@montana.edu](mailto:jaclark@montana.edu)

[www.lib.montana.edu/~jason/files.php](http://www.lib.montana.edu/~jason/files.php)