Data Projects

- NYTimes Cascade

- Just Landed

- Deutsche Telekom

- New York Talk Exchange

- Immigration to the US

- US Expansion seen through USPS

- Afghanistan activity via Wikileaks

- Flight Patterns

- Amsterdam SMS New Years Eve

Processing Intro

- Great tutorials:

  - http://processing.org/learning/gettingstarted

  - http://processing.org/learning/overview

- We're not using the Android or JavaScript output functions so examples based on version 1.5.x. Version 2.x ok.

- Folders: `~/processing/sketch, /library, /data`

- Adding libraries: oscP5, Carnivore

- Output formats: Applet or Application

- `setup` and `draw` and variable declarations

Data Types and Conditioning

In this workshop we are concentrating on network text based sources. Sources could also be local files, images, video, or raw bytes.

- Be a good steward of Data. Know your copyrights.

- Often preprocess data with other programs (Python/Perl). Get data and save to local file, then process.

- Start looking for data with a web browser (e.g. xml weather feeds).

- Reading lines of text. `loadStrings(), BufferedReader`

- Synchronous vs. Asynchronous

Parsing Data

- Look at the data first (I use TextWrangler).

- Tab and Comma Separated Values (TSV, CSV)

- HTML/XML and Tidy and Swing (preprocessing parsers)

- JSON: JavaScript Object Notation

MacPorts

- http://www.macports.org

- Great for convenient unix utilities not found in BSD Unix:

    - `wget, iperf`

- Those that are found in BSD:

    - `ping, tcpdump, curl`