

Lab 1

Network Basics:

Airbnb locations:

1. The nodes in this graph represent locations traveled to by users of Airbnb. The edges represent the relative travel volumes between two of the locations.
2. The graph is not directed, but it is weighted based on the relative travel volumes between two of the locations.

Who's connected to whom in the Hadoop world:

1. The nodes in this graph represents companies that contribute to and use Hadoop. The edges represent the connectedness between the companies. This connectedness is in the form of their shared usage of Hadoop processing environments.
2. This graph is not directed, but it is weighted based on the level of rich interconnections and relationships between pairs of companies.

Social Networks:

Amazon: When a user is about to purchase an item, Amazon recommends similar items and also recommends combinations of items people frequently purchased together along with the item you are looking at. It also recommends products based on what you purchased in the past and based on customer reviews of products.

BlogCatalog: Users on BlogCatalog can read blog posts submitted to one source rather than bloggers having to create their own websites. This means that new bloggers can have more exposure to readers because readers already know about BlogCatalog when they probably wouldn't know how to find a single blog website without being directed to it. Each post within the catalog is simply a blog written by a user and readers can see what category each post is in.

Del.icio.us: Users can create essentially a list of bookmarks that can be made public. This list can be used as a sort of personal search engine but it can also be shared with others. This provides a great way of cataloging posts based on information the user finds most interesting, which can result in very interesting lists.

Flickr: Users mainly use this site for image uploading and sharing. Users browsing the site can search by photos, people or groups and they can comment on pictures in other users' libraries. This, in tandem with a "starring" functionality where people can signify that they enjoyed a picture without commenting, creates a social interaction between users.

Last.fm: Last.fm is used to track what you listen to and from recommendations based on that information. By collecting information about other users and their listening patterns, Last.fm can even recommend artists and songs to listen to if you just search for a single artist or song that you like. On top of this, Last.fm tracks artists that are spiking in popularity, and uses this information in their algorithm to recommend new songs to you.

LinkedIn: LinkedIn is a professional social network meaning it is aimed at getting information about its users' professional careers and it provides an incentive for its users to give it this information by providing a quick way for potential employers to get information about you, like an online resume. It makes many efforts to connect you with other professionals in your life for possible business connections.

Meetup: Meetup is a website people can use to set dates for events to actually meetup with other people in person. These events can range from coding meetups to non-technical social

gatherings. It provides an interface to find meetups based on interests they gather from users and by associating similar meetups and meetups that have the same members.

Pandora: Pandora provides a music listening experience similar to that of radio, not giving you direct control over what song or artist you listen to, but rather a semi-randomized selection of artists and songs like the song or artist you want to listen to. Users can rate songs up or down to train the Pandora algorithm to give them music matching their taste.

Reddit: Reddit provides a social network of shared links, posts, and comments to its users. Every link or text post submitted by a user has a comment section attached to it, and each comment and post has a voting system attached to it. A post or comment can be up voted or down voted, resulting in a loss of popularity on the platform. Content with more up votes will be shown to readers before down voted content.

StumbleUpon: Users of StumbleUpon enter general interests while signing up. They are then given a list of websites to explore based on those interests. This provides a way of seeing sites that users otherwise would have never seen. They provide a way to express that you are uninterested in a site, and that is taken to account for later recommendations. It tracks what sites you have seen so you don't have repeats.

Vimeo: Vimeo is similar to YouTube in the way that it hosts video files for its users, but it focusses on user experience in different ways than YouTube does. It focuses on getting more detailed and quality videos on its platform rather than daily vlogging content. Users can like videos and comment on videos. They can subscribe to creators and see new videos posted by those creators.

Yelp: Users on yelp submit reviews of businesses they have done business with. It is used most often for local/small businesses. It provides information about businesses, including reviews, star ratings, whether or not someone recommends a business, and more. It also shows similar businesses