

Class presentation on clustering and Epidemic modeling

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Clustering

- Allows unsupervised classification of input data into different classes.
- Useful for grouping users based on their usage. For example separating Regular users from visitors
- K-means, PAM, Hierarchical clustering and several more.
- R and Matlab have god collection of libraries for clustering.

Clustering

- I have used it to cluster regular users and visitors at a location
- Clustering done on time spend, number of sessions and distinct days of login

Epidemic Modeling

- How to study connectivity in a Dynamic encounter graphs?
- The challenges are :
 1. Network connectivity changes with time
 2. Measuring characteristics of the network
 3. How to compare the performance of your protocol to the best/base case

Epidemic Modeling

- Epidemic routing is a controlled flooding.
- Message is given to every encountered node if that node has not already received the message.
- Every receiver becomes the message sender too.
- This allows us to measure reachability, delay and overhead.