# **CPEG 657 - Search & Data Mining ...... 2/22**

### **Search Results - Ranking Preferred**

- \* Relevance Modeling
- \*

#### **Search Before Google**

- Information gathering done at library
- Search engines were based on "keyword" matching Spammers took advantage of this

#### **Google Search**

· Page Rank - Link authority based

## **Inverse Document Frequency(IDF)**

Higher weight to less common terms

$$IDF(t) = 1 + log(n/k)$$

# **Similarity**

$$Similarity(D, Q) = \sum_{i=1}^{n}$$

# Similarity (Pivoted Normaliation Formula)

· Give priority to first occurrance and less to repeated

$$S(D,Q) = \sum_{t=Q,D} \frac{1 + \ln(1 + \ln(c(t,D)))}{(1-s) + s\frac{|D|}{avdl}} * c(t,Q) * \ln\frac{N+1}{df(t)}$$