

CS-234

Technologies for

Democratic society

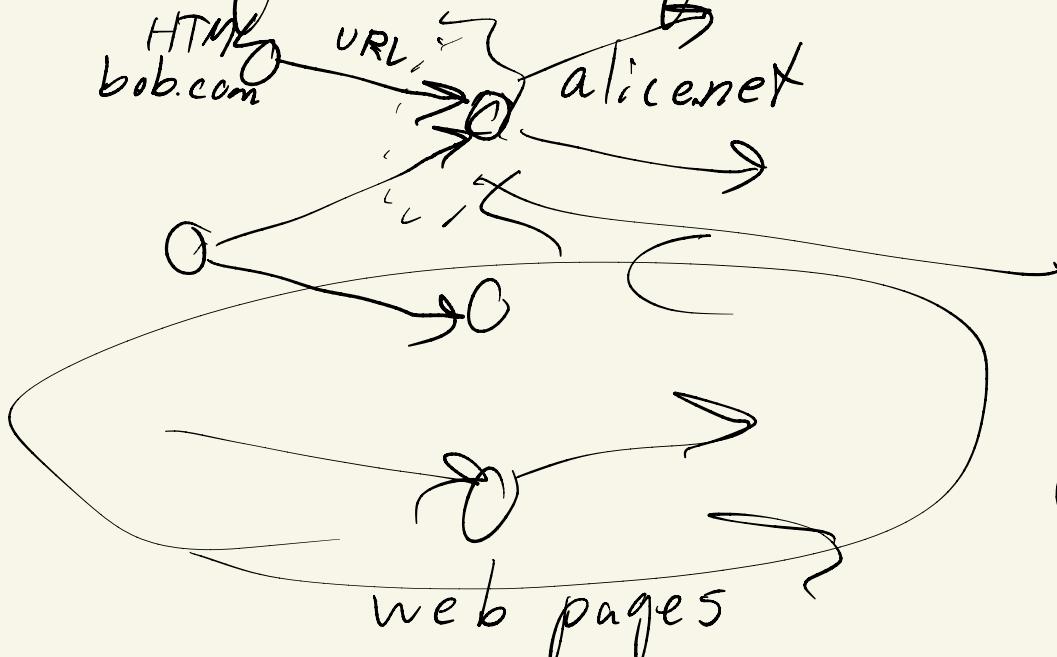
Fall 2024

Week 3

Search engines

- Yahoo, Altavista, ..
- Google - Page Rank

(Linear
programming
LP)



$$\text{influence}(\text{node}) = \alpha (\text{incoming edges}) + \left(\sum w_i \right) c + \text{Source} (\text{uniform}) ("democratic")$$

The equation defines the influence of a node in a network. It consists of three terms: a fraction (α) of the influence from incoming edges, a fraction (c) of the total influence from all other nodes in the network, and a uniform contribution from the source (the "democratic" term).

Influence on Twitter (social media)

Piketty - distribution of wealth, inequality



inequality
property, investment income ($\text{money} \rightarrow \text{money}$)
vs salary income ($\text{time} \rightarrow \text{money}$)
"rich get richer"