## Data mining: lecture 3

## Edo liberty

- 1. Frequent item sets in market basket data
  - (a) problem definition.
  - (b) Sampling works in this case... (just sample a small amount of baskets and compute offline)
  - (c) Trie, prefix tree.
  - (d) Apriory
  - (e) DIC
  - (f) Can we improve DIC by sampling?
  - (g) Can we improve it in any other way?
- 2. Frequent items in streams
  - (a) Finding an item that is more than half the entries in a stream
  - (b) finding  $\Theta$  fraction items (A Simple Algorithm for Finding Frequent Elements in Streams and Bags)
  - (c) bloom filters for membership in sets, better than hash functions.
  - (d) Min sketching (Finding Frequent Items in Data Streams)