

Activity-Aware Topic Model

In everyday life, we keep receiving recommendations from others either by words of mouth, press print, or multi-media such as TV advertising. Nowadays, recommender systems are entering our life online: advertising about something you searched the other day in Google appears in the right side of your current searching page; Amazon always tries to guess what you would be interested in and give some similar items as recommendations; content sites such as StumbleUpon provide information in particular areas which you set before.

This research will serve for recommender systems by focusing on capturing people's activities from tweets to find the associated preference topics. Such recommender system is supposed to provide more targeted information with accompanied comprehensive recommendations. The research priority is to build a categorized database for the reference of activity-aware topics. The tri-layer clusters are expected, which consist of a general topic layer, a detailed activity layer and a word layer. Fig. 1 gives two specific examples of the expected tri-layer clusters. The data source is twitter posts, and we propose two topic models to generate the tri-layer clusters.

Reference

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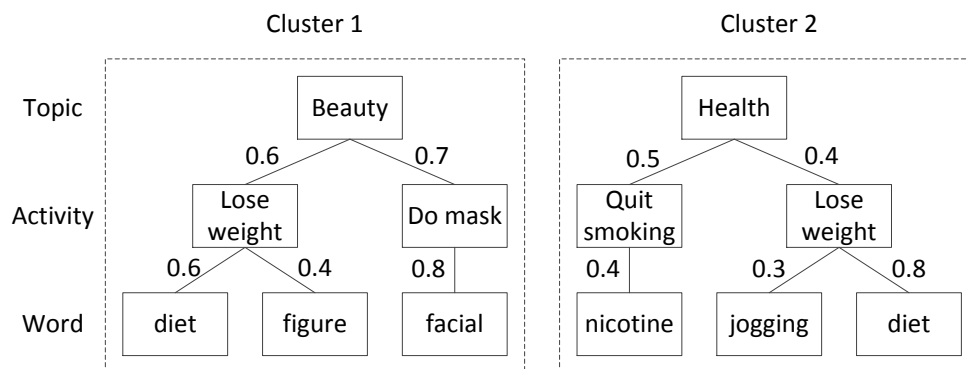


Fig. 1 Tri-layer clusters