

The process for creating the initial bipartite review graph is as follows. The key distinction with the Leskovec model is that we model two types of nodes: users and apps. Users create edges towards apps according to their chosen genres and apps' popularity (PA) within genres. Apps do not create edges towards either users or other apps. Upon arrival, users sample the number of reviews they will eventually give, while apps sample the number of timesteps they will be available for review (i.e. "trending").

1. App nodes are generated according to the app-generation function $N_A(t)$
2. Apps sample a genre k from an empirical histogram $h_{g,app}$
3. Apps sample a lifetime a from a fitted exponential function $exp(\lambda)$
4. User nodes are generated according to a user-generation function $N_U(t)$
5. Users sample a genre k from an empirical histogram $h_{g,user}$ and a lifetime (number of reviews) n_u from a histogram $h_{n,user}$
6. Users create their first edge according proportional to the degree of the (active) nodes within the genre (PA)
7. At subsequent time steps, users first sample a next genre k' according to a 1-MM process of transitions between genres.
8. Then, users create an edge to an app in the new genre according to PA, provided they have not reached their limit on edges created n_u .