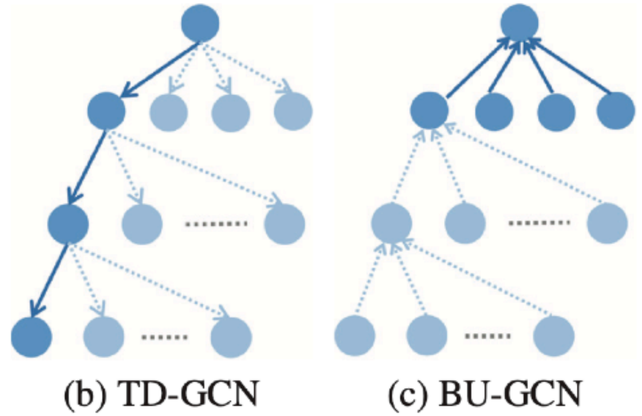
Introduction

Bi-directional GCN (Bi-GCN)



- To deal with both propagation and dispersion of rumors, proposed Bi-GCN.
- Obtains the features of
  - Propagation via Top-Down GCN (TD-GCN)
    - TD-GCN forwards information from the parent node of a node in rumor tree to formulate the rumor propagation
  - Dispersion via Bottom-Up GCN (BU-GCN)
    - BU-GCN aggregates information from the children nodes of a node in a rumor tree to represent rumor dispersion

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- Then, the representations of propagation and dispersion pooled from the embedding of TD-GCN and BU-GCN are merged together through full connections to make the final result.
- Meanwhile, concatenate the features of the roots in rumor trees with the hidden features at each GCN layer to enhance the influences from the roots of rumors.
- Employ DropEdge (Rong et al. 2019) in the training phase to avoid over-fitting.