Accepted Manuscript

C2IM: Community based context-aware influence maximization in social networks

Shashank Sheshar Singh, Ajay Kumar, Kuldeep Singh, Bhaskar Biswas

PII: S0378-4371(18)31282-2
DOI: https://doi.org/10.1016/j.physa.2018.09.142
Reference: PHYSA 20203

To appear in: *Physica A*

Received date : 9 May 2018
Revised date : 31 July 2018

Please cite this article as: S.S. Singh, et al., C2IM: Community based context-aware influence maximization in social networks, *Physica A* (2018), https://doi.org/10.1016/j.physa.2018.09.142

Highlights

- We proposed a *Community based Context-aware Influence Maximization* (C2IM) algorithm to maximize social influence in social networks.
- We introduced *Community Detection Algorithm* (CDA) to partitions the network into sub-networks.
- We utilized two diffusion models *Context-aware Linear Threshold moael* (CLT) and *Context-aware Independent Cascade model* (CIC).
- We introduced *Non-Desirable nodes Finder* (NDF) and *Seed Selection Algorithm* (SSA) algorithms to identify non-desirable nodes and seed nodes respectively.
- The results of the comparison show that the proposed algorithm is a trade-off between quality and efficiency.