UNIVERSITY OF SOUTH FLORIDA

Major Research Area Paper Presentation

Diffusion of social conventions across polarized communities:
an empirical study
by
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For the Ph.D. degree in Computer Science and Engineering

Social media environments often foster the formation of communities promoted by users' tendencies toward homophily.
These tendencies of connecting with similar users are solidified by the social media companies' algorithmic and business practices, leading to polarized networks, where communities of different interests rarely interact. This paper investigates via simulations the adoption of a new convention promoted by a persistent minority in a network polarized into two communities. We perform experiments on two real-world networks and various synthetic networks with controlled properties. We discover that the position of the persistent minority has a greater impact on spreading new conventions than its relative size. We also show that although diffusion becomes harder as network polarization increases, a persistent minority can increase its effectiveness in promoting new conventions by targeting low-influence users from the opposite community.

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11 AM EST
Online (Microsoft Teams)
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THE PUBLIC IS INVITED

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