# Fireflies predict network loyalty

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Online social networking generates vast quantities of data that might be useful to the service providers, advertising agencies, and even the users themselves. Writing in the *International Journal of Communication Networks and Distributed Systems* this month, researchers in India describe an approach to establishing new connections in a network using what they refer to as a "firefly swarm approach"

Ebin Deni Raj and Dhinesh Babu of the School of Information Technology and Engineering, VIT University, in Tamil Nadu, explain that the emergence of social computing, especially in the face of the advent of cloud computing, opens up new ways to extract, analyze and use big data from online networks.

The essence of social computing is community, collaboration and connectivity, but analyzing the three C's is key to converting data and information into knowledge that might predict trends and help provider and user alike as well as third-parties, such as advertisers. Of course there are hundreds of social networking sites, some more well used and subscribed to than others. Moreover, today's trendy online haunt can soon become yesterday's virtual ghost town as has been well-documented by pundits and the technology media over the years.

Raj and Babu suggest that their work can provide a way to predict whether an individual member of social network will remain loyal to that service or find a new favorite and move on. Obviously, such a predictor would be useful to a given service provider who, forewarned of an imminent departure, might tailor a new offering to that person that

persuades them to stay. Their firefly algorithm is just such a tool - it offers a probability of a user staying in a given social network as well as calculating the connections in that network.

**More information:** Raj, E.D. and Dhinesh Babu, L.D. (2015) 'A firefly swarm approach for establishing new connections in social networks based on big data analytics', *Int. J. Communication Networks and Distributed Systems*, Vol. 15, Nos. 2/3, pp.130-148.

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