

## **Motivation and Embeddedness of Wikipedia Editors**

*Nemoto, K. Gloor, P. Laubacher, R.*

This paper analyzes editing patterns of Wikipedia contributors using dynamic social network analysis. Our research question is what motivates the most active Wikipedians to spend a huge amount of time doing their authoring and editing work. In particular we analyze the editing network of the 2716 featured articles in the English language Wikipedia. Featured articles (FA) are the articles Wikipedians consider their best work. As a metric of success we measure the amount of time it takes an article from its creation to be promoted to FA.

To construct the social network we convert the edit flow among contributors into a temporal social network. In particular, we analyze the response patterns on the talk pages of the editors working on FA. A link is constructed if one editor of a featured article puts a comment on the talk page of another editor who has worked on the same FA. A link between two editors means they both have worked on the same article, and one has written a comment on the talk page of the other. We therefore construct a type of “friendship network” among the editors. We found that density, betweenness, and degree centrality of the network significantly negatively correlate with the “time to FA” of an article. This means that the denser the network, and the more centralized the network, the faster the article reaches the “featured” status. It therefore seems that the more embedded Wikipedians are in a tight group of friends, the better the work they do.