



TECHNOLOGY

Joint Optimization for Social Content Dissemination in Wireless Networks

OVERVIEW

Background

Social networks such as Facebook, Twitter, Google+ and others use their users' profiles to recommend content. Relevance of the recommended content to the user is extremely important as it determines the quality of user experience, and thus user's willingness to continue to utilize the network. Another important factor of user experience is ability to download content fast and without interruptions. Unfortunately most social network applications were designed for wired connections assuming unlimited capacity and reliable transmission. Wireless networks have significant constraints on the ability to transmit data, and since a large portion of desired content consists of multimedia (photos, videos, audio), the disparity between the network capacity constraints and expectation of seamless deliver results in poor user experience for users of mobile devices.

Innovative Technology

Researchers at the University of Maryland have developed a system that facilitates content dissemination by leveraging predictions of social dynamics to transmit the content to the users before they request it. Hybrid dissemination system improves the overall performance by increasing accuracy of proper content prioritization.

APPLICATIONS

- Wireless networks
- System design
- Social networks

ADVANTAGES

- Enhanced user experience for mobile devices
- Spectrum resource savings
- Reduced wireless bandwidth needs

CONTACT INFO

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Additional Information

INSTITUTION

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PATENT STATUS

Pending

EXTERNAL RESOURCES

