Efficient Data Forwarding in Mobile Social Networks with Diverse Connectivity Characteristics
Xiaomei Zhang, Guohong Cao

**Overview**

- **Motivation:**
  - In mobile social networks, there is ubiquitous existence of Transient Connected Components (TCCs).
  - With traditional “compare-and-forward” strategy, the node with the highest centrality (node C) cannot get the data.

- **Goals:**
  - Identify the existence of TCCs and study how TCCs increase the contact opportunities.
  - Design more efficient data forwarding strategies with the existence of TCCs.

**Existence of TCCs**

- Distribution of TCC sizes
- The increase of contact opportunities:
  - Two nodes are in TCC-contact, if they are within the same TCC.

**TCC-aware Strategy**

- Forwarding decisions are made when new TCCs are formed.
- Within the new TCC, the data item is forwarded to the node with the highest centrality.

**Enhanced TCC-aware Strategy**

- TCC-aware strategy is not always the optimal solution.
- Enhanced TCC-aware strategy: if k data copies exist in a TCC, we choose an optimal node set of size k that maximize the overall data forwarding capability.

**Performance Evaluation**

- Delivery Ratio: proportion of data items successful delivered
- Overhead: average number of data copies for each data item

**Related Publications**


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