#74 (1570533488): Interest-based Epidemic Routing in Opportunistic Mobile Networks

#74 (1570533488): *Interest-based Epidemic Routing in Opportunistic Mobile Networks*

BibTeX

Property	Change Add	Value
Conference and *track*		**2019 7th International Conference on Information and Communication Technology (ICoICT)** - *Sensing Devices and Systems*

	Name	ID	Edit	Flag	Affiliation (edit for paper)	Email	Country
Authors	Vittalis Ayu	1656013	not creator		Sanata Dharma University, Indonesia	vittalis.ayu@usd.ac.id	Indonesia
	Bambang Soelistijanto	731989	✎		Sanata Dharma University, Indonesia	b.soelistijanto@usd.ac.id	Indonesia

Title	Only the chairs can edit	*Interest-based Epidemic Routing in Opportunistic Mobile Networks*
Abstract	Only the chairs can	Message delivery in opportunistic mobile networks is a challenging task since the network topology constantly changes

edit

and end-to-end paths can hardly be sustained. Epidemic routing forwards a copy message to each contacted node to achieve a high network delivery performance; this however easily burdens the network nodes with high traffic load, quickly depleting the nodes' resources, e.g. power and storage, and finally degrading the network delivery performance. This paper proposes an interest-based Epidemic that improves Epidemic to be a content-aware forwarding by taking message content, node interest, and node community into consideration. Using simulation, driven by real human contact datasets, we investigate the performance of the proposed algorithm compared with Epidemic (content-oblivious) and Direct Transmission (content-aware), in terms of total delivered messages, average convergence time, and total relayed messages. Simulation results show that Epidemic-Interest outperforms Direct Transmission in terms of total delivered message and average convergence time. Moreover, compared with Epidemic, it can reduces the transmission cost while keeping the total delivered messages as high as Epidemic's; however, it increases the convergence time beyond that of Epidemic.

Topics	Only the chairs can edit	
Presenter(s)		Vittalis Ayu
Session		The program is not yet visible.
DOI	Only the chairs can edit	
Status		Accepted
Copyright form		IEEE; IEEE: May 14, 2019 19:30 America/New_York

However, authors cannot upload: presentation deadline

Presentation — Could upload until Jul 16, 2019 07:59 America/New_York.

Document (show)	Pages	File size	Changed
	16	796,713	Jul 16, 2019 04:43 America/New_York

Final manuscript — Could upload until Jun 1, 2019 07:59 America/New_York.

However, authors cannot upload: final deadline

Document (show)	Pages	File size	Changed

	6	386,564	Jul 5, 2019 02:09 America/New_York	

However, authors cannot upload:

	Document (show)	Pages	File size	Changed
Stamped for attendee proceedings		6 (318...323)	406,070	Aug 14, 2019 02:49 America/New_York
Stamped for IEEE Xplore		6 (318...323)	406,069	Aug 14, 2019 02:49 America/New_York

Personal notes

You are an author for this paper. You have authored an accepted paper.

Reviews

2 Reviews

Review 1

None of the scores are visible for your roles.

Detailed Comments (Please justify your recommendation and suggest improvements in technical content or presentation.)

This study introduces an interest-based Epidemic routing to improve Epidemic routing with concept of flooding by taking into account node interest and node community to select optimal relay nodes.

The research methodology is relatively well presented with strengths such as described the details of the proposed algorithm of Epidemic-Interest routing, data collection procedures with simulation setup and performance metrics (total delivered & relayed messages and average convergence time) for evaluating the protocol were provided and data analysis focuses on the benchmark of the proposed algorithm with both Epidemic and a simple content aware routing algorithm being highlighted. The author has provided quite adequate discussion on the results obtained.

The recent literature (less than 5 years) appear scarce. It is recommended that the literature be updated including those recent important development.

Review 2

None of the scores are visible for your roles.

Detailed Comments (Please justify your recommendation and suggest improvements in technical content or presentation.)

The paper is well written and can be considered for accept. However, the author is required to add a new section (before conclusion) to summarize/discuss the finding based on figure 1 -8.

The literature review is out to date. Add some new literature to justify the study.