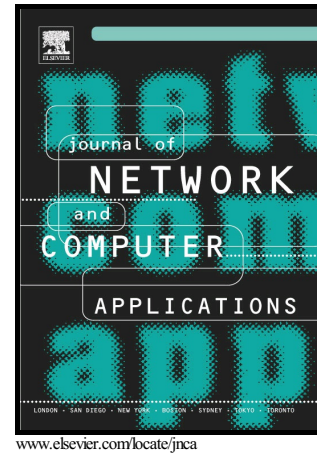


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PII: S1084-8045(17)30275-8
DOI: <http://dx.doi.org/10.1016/j.jnca.2017.08.012>
Reference: YJNCA1958

To appear in: *Journal of Network and Computer Applications*

Received date: 5 January 2017
Revised date: 23 June 2017
Accepted date: 22 August 2017

Cite this article as: Chaoyue Niu, Minping Zhou, Zhenzhe Zheng, Fan Wu and Guihai Chen, ERA: Towards Privacy Preservation and Verifiability for Online Ad Exchanges, *Journal of Network and Computer Applications*, <http://dx.doi.org/10.1016/j.jnca.2017.08.012>

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Chaoyue Niu, Minping Zhou, Zhenzhe Zheng, Fan Wu*, Guihai Chen

*Shanghai Key Laboratory Scalable Computing and Systems
Shanghai Jiao Tong University, China*

Abstract

Ad exchanges are kind of the most popular online advertising marketplaces for trading ad spaces over the Internet. Ad exchanges run auctions to sell diverse ad spaces on the publishers' web-pages to advertisers, who want to display ads on ad spaces. However, the parties in an ad auction cannot verify whether the auction is carried out correctly or not. Furthermore, the advertisers are usually unwilling to reveal their sensitive bids and identities. In this paper, we jointly consider the auction verifiability and the advertisers' privacy preservation, and thus propose ERA, which is an Efficient, privacy-preserving, and verifiAble online auction mechanism for ad exchanges. ERA

[☆]This work was supported in part by the State Key Development Program for Basic Research of China (973 project 2014CB340303), in part by China NSF grant 61672348, 61672353, 61422208, and 61472252, in part by Shanghai Science and Technology fund 15220721300, and in part by the Scientific Research Foundation for the Returned Overseas Chinese Scholars. The opinions, findings, conclusions, and recommendations expressed in this paper are those of the authors and do not necessarily reflect the views of the funding agencies or the government.

*F. Wu is the corresponding author.

Email addresses: rvincency@gmail.com (Chaoyue Niu),
zhouminping1991@gmail.com (Minping Zhou), zhengzhenzhe220@gmail.com
(Zhenzhe Zheng), fwu@cs.sjtu.edu.cn (Fan Wu), gchen@cs.sjtu.edu.cn
(Guihai Chen)

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