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*What Online Reviewer Behaviors Really Matter?*  
*Effects of Verbal and Nonverbal Behaviors on Detection of*  
*Fake Online Consumer Reviews*

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**Abstract**

The value and credibility of online consumer reviews are compromised by significantly increasing yet difficult-to-identify fake reviews. Extant models for automated online fake review detection rely heavily on verbal behaviors of reviewers while largely ignoring their nonverbal behaviors. This research identifies a variety of nonverbal behavioral features of online reviewers and examines their relative importance for the detection of fake reviews in comparison to that of verbal behavioral features. The results of an empirical evaluation using real-world online reviews reveal that incorporating nonverbal features of reviewers can significantly improve the performance of online fake review detection models. Moreover, compared with verbal features, nonverbal features of reviewers are shown to be more important for fake review detection. Furthermore, model pruning based on a sensitivity analysis improves the parsimony of the developed fake review detection model without sacrificing its performance.

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## **A Short Biography of Prof. Dongsong ZHANG**

Prof. Dongsong Zhang is a full professor of Information Systems at University of Maryland, Baltimore County, USA. He received his Ph.D. in Management Information Systems from the Eller School of Management at the University of Arizona in 2002. His research interests include mobile HCI, social computing, adaptive and personalized technologies, business intelligence, and knowledge management. He has published approximately 140 research articles in journals and conference proceedings, including journals such as MIS Quarterly, Communications of the ACM (CACM), Journal of Management Information Systems (JMIS), ACM Transactions on Accessible Computing, IEEE Transactions on Knowledge and Data Engineering (TKDE), IEEE Transactions on Software Engineering, IEEE Transactions on Multimedia, IEEE Transactions on Systems, Man, and Cybernetics, IEEE Transactions on Human-Machine Systems, IEEE Transactions on Professional Communication, IEEE Intelligent Systems, among others. He has received a dozen research grants and awards from U.S. National Science Foundation (NSF), National Institute of Health (NIH), U.S. Department of Education, Google Inc., National Natural Science Foundation of China, and Chinese Academy of Sciences. According to Google Scholar, his work has been cited more than 6,000 times. Prof. Zhang is currently a senior editor or an associate editor of 6 International journals.

**ALL ARE WELCOME!**