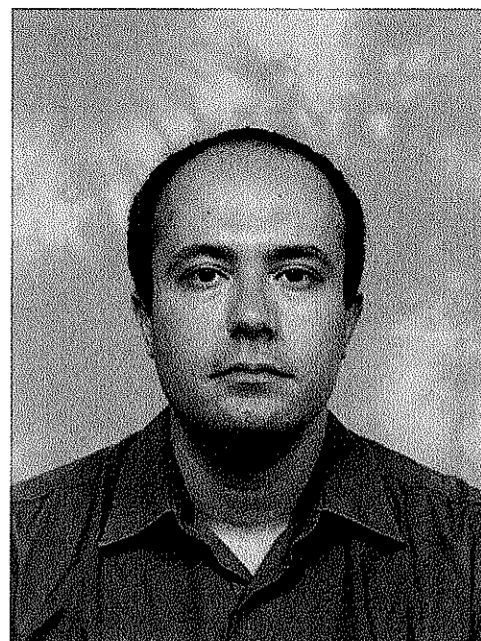




**Opportunistic Networks
Meet Infrastructure:
Performance, Security and
Privacy Implications**



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Περίληψη

Opportunistic networks are composed of mobile wireless devices that communicate when within range of each other, i.e. when there is a contact. No end-to-end connectivity is assumed to exist, so data is stored and carried until an opportunity for forwarding appears. However, since user mobility is slow compared to the data transmission speed, the applications on such networks have to be sufficiently delay tolerant. On the other hand, the traffic load of cellular infrastructure networks is increasing due to user demand for internet content.

I will present recent experimental results on the performance enhancements when merging infrastructure into an opportunistic network. From a more theoretical perspective, I will show how privacy against the infrastructure can improve through opportunistic collaboration between users, and also how a worm propagating in an opportunistic network can spread faster if the infrastructure starts sending security alerts.

Σύντομο Βιογραφικό

George Theodorakopoulos is a senior researcher at the École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland. He received his Ph.D. and M.Sc. from the University of Maryland, College Park, and his B.Sc. from the National Technical University of Athens, Greece, all in Electrical and Computer Engineering, in 2007, 2004, and 2002, respectively.

Half of his Ph.D. work was on the application of the algebraic path problem to trust computation. This work resulted in two awards: the best paper award at the ACM Wireless Security workshop (WiSe 2004) and the IEEE Leonard G. Abraham prize (IEEE Journal on Selected Areas in Communications 2006). His research interests also include game theory (the other half of his Ph.D.), trust and reputation systems, and network security. At EPFL, he is working on opportunistic networks.

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