[11] J. Freudiger, M. Manshaei, J.-P. Hubaux, and D. Parkes. Non-cooperative location privacy. *IEEE TDSC*, 10(2):84–98, March 2013.

[12] B. Gedik and L. Liu. Protecting location privacy with personalized k-anonymity: Architecture and algorithms. *IEEE TMC*, 7(1):1–18, January 2008.

[13] P. Golle and K. Partridge. On the anonymity of home/work location pairs. 5538:390–397, 2009. 10.1007/978-3-642-01516-8_26.

[14] M. C. González, C. A. Hidalgo, and A.-L. Barabási. Understanding individual human mobility patterns. *Nature*, 453(7196):779–782, June 2008.

[15] M. C. Grace, W. Zhou, X. Jiang, and A.-R. Sadeghi. Unsafe exposure analysis of mobile in-app advertisements. In *Proceedings of WISEC '12*, pages 101–112, New York, NY, USA, 2012. ACM.

[16] S. Guha, M. Jain, and V. N. Padmanabhan. Koi: A location-privacy platform for smartphone apps. In *Proceedings of NSDI'12*, pages 14–14, Berkeley, CA, USA, 2012. USENIX Association.

[17] B. Hoh, M. Gruteser, H. Xiong, and A. Alrabady. Achieving guaranteed anonymity in gps traces via uncertainty-aware path cloaking. *IEEE Transcations on Mobile Computing*, 9(8):1089–1107, August 2010.

[18] O. Jan, A. J. Horowitz, and Z.-R. Peng. Using global positioning system data to understand variations in path choice. *Transportation Research Record: Journal of the Transportation Research Board*, 1725(2000):37–44, 2000.

[19] J. Krumm. Inference attacks on location tracks. In *In Proceedings of the Fifth International Conference on Pervasive Computing (Pervasive), volume 4480 of LNCS*, pages 127–143. Springer-Verlag, 2007.

[20] J. Krumm. Realistic driving trips for location privacy. In *Proceedings of Pervasive '09*, pages 25–41, Berlin, Heidelberg, 2009. Springer-Verlag.

[21] J. Krumm. A survey of computational location privacy. *Personal Ubiquitous Computing*, 13(6):391–399, August 2009.

[22] B. Livshits and J. Jung. Automatic mediation of privacy-sensitive resource access in smartphone applications. In *Proceedings of USENIX Security '13*, pages 113–130, Berkeley, CA, USA, 2013. USENIX Association.

[23] H. Lu, C. S. Jensen, and M. L. Yiu. PAD: privacy-area aware, dummy-based location privacy in mobile services. In *Proceedings of MobiDE '08*, pages 16–23, New York, NY, USA, 2008. ACM.

[24] J. Meyerowitz and R. R. Choudhury. Realtime location privacy via mobility prediction: Creating confusion at crossroads. In *HotMobile*, 2009.

[25] J. Meyerowitz and R. Roy Choudhury. Hiding stars with fireworks: location privacy through camouflage. In *Proceedings of MobiCom '09*, pages 345–356, New York, NY, USA, 2009. ACM.

[26] K. Micinski, P. Phelps, and J. S. Foster. An Empirical Study of Location Truncation on Android. In *Mobile Security Technologies (MoST '13)*, San Francisco, CA, May 2013.

[27] Microsoft Trustworthy Computing. Location based services and privacy. http://www.microsoft.com/en-us/download/confirmation.aspx?id=3250, January 2011.

[28] A. Nandugudi, A. Maiti, T. Ki, F. Bulut, M. Demirbas, T. Kosar, C. Qiao, S. Y. Ko, and G. Challen. PhoneLab: A large programmable smartphone testbed. In *Proceedings of SENSEMINE '13*, pages 4:1–4:6, New York, NY, USA, 2013. ACM.

[29] B. Palanisamy and L. Liu. Mobimix: Protecting location privacy with mix-zones over road networks. In *Proceedings of ICDE '11*, pages 494 –505, april 2011.

[30] P. Pearce, A. P. Felt, G. Nunez, and D. Wagner. Addroid: Privilege separation for applications and advertisers in android. In *Proceedings of ASIACCS '12*, pages 71–72, New York, NY, USA, 2012. ACM.

[31] PlaceMask. Placemask location privacy, May 2014.

[32] K. Puttaswamy, S. Wang, T. Steinbauer, D. Agrawal, A. El Abbadi, C. Kruegel, and B. Zhao. Preserving location privacy in geosocial applications. *IEEE TMC*, 13(1):159–173, Jan 2014.

[33] rovo89. Xposed module repository, May 2014.

[34] C. Shepard, A. Rahmati, C. Tossell, L. Zhong, and P. Kortum. Livelab: Measuring wireless networks and smartphone users in the field. In *HotMetrics*, 2010.

[35] K. Shin, X. Ju, Z. Chen, and X. Hu. Privacy protection for users of location-based services. *Wireless Communications, IEEE*, 19(1):30 –39, february 2012.

[36] R. Shokri, G. Theodorakopoulos, G. Danezis, J.-P. Hubaux, and J.-Y. Le Boudec. Quantifying location privacy: the case of sporadic location exposure. In *Proceedings of PETS '11*, pages 57–76, Berlin, Heidelberg, 2011. Springer-Verlag.

[37] R. Shokri, G. Theodorakopoulos, J. Le Boudec, and J. Hubaux. Quantifying location privacy. In *IEEE Symposium on Security and Privacy (SP),2011*, pages 247 –262, May 2011.

[38] R. Stevens, C. Gibler, J. Crussell, J. Erickson, and H. Chen. Investigating user privacy in android ad libraries. In *Mobile Security Technologies (MoST '12)*, May 2012.

[39] U.S. Census Bureau. US Census Bureau 2010 Census Interactive Population Map. http://www.census.gov/2010census/popmap/, 2014.

[40] N. Vratonjic, K. Huguenin, V. Bindschaedler, and J.-P. Hubaux. How others compromise your location privacy: The case of shared public ips at hotspots. In E. Cristofaro and M. Wright, editors, *Privacy Enhancing Technologies*, volume 7981 of *Lecture Notes in Computer Science*, pages 123–142. Springer Berlin Heidelberg, 2013.

[41] R. Xu, H. Saïdi, and R. Anderson. Aurasium: Practical policy enforcement for android applications. In *Proceedings of USENIX Security '12*, pages 27–27, Berkeley, CA, USA, 2012. USENIX Association.

[42] T.-H. You, W.-C. Peng, and W.-C. Lee. Protecting moving trajectories with dummies. In *Mobile Data Management, 2007 International Conference on*, pages 278 –282, may 2007.

[43] H. Zang and J. Bolot. Anonymization of location data does not work: a large-scale measurement study. In *Proceedings of MobiCom '11*, pages 145–156, New York, NY, USA, 2011. ACM.