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PEER-REVIEWED PUBLICATIONS

Available at <http://eecs.berkeley.edu/~pmittal>

1. **Prateek Mittal**, Charalampos Papamanthou, and Dawn Song. Preserving Link Privacy in Social Network Based Systems. In *Proceedings of the 20th Network and Distributed System Security Symposium (NDSS)*, 2013. 18% acceptance rate.
2. **Prateek Mittal**, Matthew Wright, and Nikita Borisov. Pisces: Anonymous Communication Using Social Networks. In *Proceedings of the 20th Network and Distributed System Security Symposium (NDSS)*, 2013. 18% acceptance rate.
3. Shirin Nilizadeh, Sonia Jahid, **Prateek Mittal**, Nikita Borisov, and Apu Kapadia. Cachet: Privacy Preserving Social Networking Using Object Caching. In *Proceedings of the 8th ACM International Conference on Emerging Networking Experiments and Technologies (CoNEXT)*, 2012. 17% acceptance rate.
4. Neil Zhenqiang Gong, Wenchang Xu, Ling Huang, **Prateek Mittal**, Emil Stefanov, Vyas Sekar, and Dawn Song. Evolution of Social-Attribute Networks: Measurements, Modeling, and Implications using Google+. In *Proceedings of the 12th ACM Internet Measurement Conference (IMC)*, 2012. 24% acceptance rate.
5. Frank Li, **Prateek Mittal**, Matthew Caesar, and Nikita Borisov. Practical Sybil Defense Using Computational Puzzles. In *Proceedings of the 7th ACM Workshop on Scalable Trusted Computing (STC)*, 2012.
6. Sonia Jahid, Shirin Nilizadeh, **Prateek Mittal**, Nikita Borisov, and Apu Kapadia. DECENT: A Decentralized Architecture for Enforcing Privacy in Online Social Networks. In *Proceedings of the 4th IEEE International Workshop on Security and Social Networking (SESOC)*, 2012. 29% acceptance rate.
7. **Prateek Mittal** and Nikita Borisov. Information Leaks in Structured Peer-to-peer Anonymous Communication. In *ACM Transactions on Information and Systems Security, Special Issue on Selected Papers from CCS (TISSEC)*, 2012.
8. **Prateek Mittal**, Matthew Caesar, and Nikita Borisov. X-Vine: Secure and Pseudonymous Routing Using Social Networks. In *Proceedings of the 19th Networks and Distributed Systems Security Symposium (NDSS)*, 2012. 17% acceptance rate.
9. Vinay Varadan*, **Prateek Mittal***, Charles Vaske, and Stephen Benz. (*Joint first author). Computational Frameworks for Integration of Biological Pathway Knowledge in Cancer Genomics. In *IEEE Signal Processing Magazine, Special Issue on Genomic and Proteomic Signal Processing in Biomolecular Pathways (IEEE SPM)*, 2012. Highest impact factor amongst all IEEE venues as per JCR.
10. **Prateek Mittal**, Ahmed Khurshid, Joshua Juen, Matthew Caesar, and Nikita Borisov. Stealthy Traffic Analysis of Low-latency Anonymous Communication Using Throughput Fingerprinting. In *Proceedings of the 18th ACM Conference on Computer and Communications Security (CCS)*, 2011. 14% acceptance rate.
11. **Prateek Mittal**, Femi Olumofin, Carmela Troncoso, Nikita Borisov, and Ian Goldberg. PIR-Tor: Scalable Anonymous Communication Using Private Information Retrieval. In *Proceedings of the 20th USENIX Security Symposium (USENIX Security)*, 2011. 17% acceptance rate.

12. Sonia Jahid, **Prateek Mittal**, and Nikita Borisov. EASiER: Encryption-based Access Control in Social Networks with Efficient Revocation. In *Proceedings of the 6th ACM Symposium on Information, Computer and Communications Security (ASIACCS)*, 2011. 27.6% acceptance rate.
13. Qiyan Wang, **Prateek Mittal**, and Nikita Borisov. In Search of a Secure and Anonymous Lookup: Attacks on Peer-to-peer Anonymous Communication Systems. In *Proceedings of the 17th ACM Conference on Computer and Communications Security (CCS)*, 2010. 17% acceptance rate.
14. **Prateek Mittal**, Nikita Borisov, Carmela Troncoso, and Alfredo Rial. Scalable Anonymous Communication with Provable Security. In *Proceedings of the 5th USENIX Workshop on Hot Topics in Security (HotSec)*, 2010. 19% acceptance rate.
15. Shishir Nagaraja*, **Prateek Mittal***, Chi-Yao Hong, Matthew Caesar, and Nikita Borisov. (*Joint first author). BotGrep: Detecting P2P Botnets using Structured Graph Analysis. In *Proceedings of the 19th USENIX Security Symposium (USENIX Security)*, 2010. 14% acceptance rate.
16. **Prateek Mittal** and Nikita Borisov. ShadowWalker: Peer-to-peer Anonymous Communication Using Redundant Structured Topologies. In *Proceedings of the 16th ACM Conference on Computer and Communications security (CCS)*, 2009. 18% acceptance rate.
17. **Prateek Mittal**, Vern Paxson, Robin Sommer, and Mark Winterrowd. Securing Mediated Trace Access Using Black-box Permutation Analysis. In *Proceedings of the 8th ACM Workshop on Hot Topics in Networks (HotNets)*, 2009. 16% acceptance rate.
18. George Danezis* and **Prateek Mittal***. (*Joint first author). SybilInfer: Detecting Sybil Nodes using Social Networks. In *Proceedings of the 16th Network and Distributed Systems Security Symposium (NDSS)*, 2009. 11% acceptance rate.
19. **Prateek Mittal** and Nikita Borisov. Information Leaks in Structured Peer-to-peer Anonymous Communication Systems. In *Proceedings of the 15th ACM Conference on Computer and Communications Security (CCS)*, 2008. 18% acceptance rate.
Selected Outstanding Paper, forwarded to ACM Transactions on Information and Systems Security.
20. Vijay Anand Reddy*, **Prateek Mittal***, and Indranil Gupta. (*Joint first author). Fair K-Mutual Exclusion Algorithm for Peer to Peer Systems. In *Proceedings of the 28th International Conference on Distributed Computing Systems (ICDCS)*, 2008. 16% acceptance rate.
21. Nikita Borisov, George Danezis, **Prateek Mittal**, and Parisa Tabriz. Denial of Service or Denial of Security? In *Proceedings of the 14th ACM Conference on Computer and Communications Security (CCS)*, 2007. 18% acceptance rate.

PUBLICATIONS UNDER REVIEW

22. Neil Gong, **Prateek Mittal**, Mario Frank, and Dawn Song. SybilBelief: A Semi-Supervised Learning Approach for Detecting Social Sybils. Under review at *IEEE Symposium on Security and Privacy (IEEE S&P)*, 2013.
23. Anupam Das, **Prateek Mittal**, Nikita Borisov, and Yih-Chun Hu. Profiling Participants in Anonymous Communication Systems Using Reputation. Under review at *IEEE Symposium on Security and Privacy (IEEE S&P)*, 2013.
24. **Prateek Mittal**, Dongho Kim, Yih-Chun Hu, and Matthew Caesar. Towards a Deployable DDoS Defense for Web Applications. Under review at *International World Wide Web Conference (WWW)*, 2013.
25. **Prateek Mittal***, Vinay Varadan*, Sitharthan Kamalakaran, Nilanjana Banerjee, Angel Janevski, and Nevenka Dimitrova. (*Joint first author). Understanding Cancer Using Information Flow in Gene Networks. Under review at *PLoS Computational Biology (Computational Biology)*, 2013.

PATENTS

26. **Prateek Mittal***, Vinay Varadan*, Sitharthan Kamalakaran, Nilanjana Banerjee, Angel Janevski, and Nevenka Dimitrova. (with Philips Research). Method for Estimation of Information Flow in Biological Networks. Patent filed in March 2011.

THESIS

27. **Prateek Mittal**. Trustworthy and Scalable Anonymous Communication. *Ph.D. Thesis, University of Illinois at Urbana-Champaign*, 2012.
28. **Prateek Mittal**. A Security Evaluation of the Salsa Anonymous Communication System. *M.S. Thesis, University of Illinois at Urbana-Champaign*, 2010.
29. **Prateek Mittal** and Gautam Barua. Using Deterministic Edge Route Marking to Defend Against DDoS Attacks. *B.TECH Thesis, Indian Institute of Technology at Guwahati*, 2006.