Preventing Data Leakage during Web Service Accesses

by

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Submitted to the Department of Electrical Engineering and Computer Science
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Abstract

Web services, like Google, Facebook, and Dropbox, are a regular part of users' lives. As a form of payment, these services collect, store, and analyze user data. Even just accessing these web services can leak a substantial amount of data.

This dissertation shows how to prevent two types of leakage

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Frank Wang, Catherine Yun, Shafi Goldwasser, Vinod Vaikuntanathan, and Matei Zaharia. Splinter: Practical Private Queries on Public Data. In *Proceedings of Networked Systems Design and Implementation (NSDI)*, 2017.

Frank Wang, James Mickens, and Nickolai Zeldovich. Veil: Private Browsing Semantics Without Browser-side Assistance. In *Proceedings of Network and Distributed System Security Symposium (NDSS)*, 2018.

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