

TAO WANG

Assistant Professor

Department of Computer Science and Engineering

Hong Kong University of Science and Technology

PHONE: (852) 2358 8837

EMAIL: taow@cse.ust.hk

RESEARCH INTERESTS

- Security and privacy
- Anonymity networks
- Network traffic analysis
- Machine learning

EDUCATION

DEC. 2016 Ph. D. in COMPUTER SCIENCE, **University of Waterloo**
(expected) Thesis: “Website Fingerprinting: Attacks and Defenses” — Advisor: Prof. Ian Goldberg

JAN. 2012 Master of Mathematics in COMPUTER SCIENCE, **University of Waterloo**

SEP. 2010 B. Sc. in PURE MATHEMATICS, **Hong Kong University of Science and Technology**

PEER-REVIEWED PAPERS

Published

A Systematic Approach to Developing and Evaluating Website Fingerprinting Defenses

X Cai, R Nithyanand, T Wang, R Johnson and I Goldberg
21st ACM Conference on Computer and Communications Security, 2014

Effective Attacks and Provable Defenses against Website Fingerprinting

T Wang, X Cai, R Nithyanand, R Johnson and I Goldberg
23rd USENIX Security Symposium, 2014

Improved Website Fingerprinting on Tor

T Wang and I Goldberg
12th ACM Workshop on Privacy in the Electronic Society, 2013

Congestion-Aware Path Selection in Tor

T Wang, K Bauer, C Forero and I Goldberg
16th International Conference on Financial Cryptography and Data Security, 2012

On Realistically Attacking Tor with Website Fingerprinting

T Wang and I Goldberg
Proceedings on Privacy Enhancing Technologies, 2016

Under review

Walkie-Talkie: An Effective and Efficient Defense against Website Fingerprinting

T Wang and I Goldberg

Submitted to 23rd ACM Conference on Computer and Communications Security, 2016

TECHNICAL REPORTS

Comparing Website Fingerprinting Attacks and Defenses

T Wang and I Goldberg

POSTERS

Practical Website Fingerprinting on Tor

T Wang and I Goldberg

Presented at IEEE Symposium on Security and Privacy, 2014

Website Fingerprinting: Attacks and Defenses

T Wang and I Goldberg

Presented at IEEE Symposium on Security and Privacy, 2013

EXPERIENCE

2015	Instructor, UNIVERSITY OF WATERLOO Instructor for CS458/658 (Computer Security and Privacy)
2015	Reviewer External reviewer for International Journal of Information Security External reviewer for Transactions on Dependable and Secure Computing
2011 – 2014	Teaching Assistant, UNIVERSITY OF WATERLOO <ul style="list-style-type: none">• CS135 (Designing Functional Programs): Corrected assignments and exams.• CS370 (Numerical Computation): Corrected assignments and exams.• CS458/658 (Computer Security and Privacy): Corrected assignments and exams, designed assignments, and held office hours.

SCHOLARSHIPS AND AWARDS

2014-2015 Ontario Graduate Scholarship

2014-2015 President's Graduate Scholarship

2013-2014 QEII Ontario Graduate Scholarship in Science and Technology