Fan Zhang

Basic Information

Name: Fan Zhang
Dept. of Computer Science
Cornell University
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Education

Ph.D. Student in Computer Science August 2014–
Advisor: Prof. Ari Juels
Dept. of Computer Science
Cornell University

B.S. in Electronic Engineering Aug, 2010 – Jul, 2014
Dept. of Electronic Engineering
Tsinghua University
Beijing, China
GPA: 91.1 (out of 100)

Research Interests

I'm interested in systems security and applied cryptography. In particular, my recent projects explore the new security model offered by a combination of blockchains and trusted hardware (e.g. Intel SGX).

Working Experience

Researcher intern Jul, 2017 – Aug, 2017
SPR, Intel Labs Hillsboro, OR

- Contributed to SGX-based distributed ledger.

System developer intern Jun, 2013 – May, 2014
Intel Opensource Technology Center (01.org) Beijing, China

- Contributed to the secure NFC payment component in Tizen OS
- Revamped the CVE scanner for Tizen OS

Publications

[1] Ethan Cecchetti, **Fan Zhang**, Yan Ji, Ahmed Kosba, Ari Juels and Elaine Shi. Solidus: Confidential Distributed Ledger Transactions via PVORM. In *ACM CCS 17*.

[2] **Fan Zhang**, Ittay Eyal, Robert Escriva, Ari Juels and Robbert van Renesse. REM: Resource-Efficient Mining for Blockchains. In *USENIX Security 17*, Vancouver, Canada, August 2017.

[3] Florian Tramer, **Fan Zhang**, Huang Lin, Jean-Pierre Hubaux, Ari Juels, and Elaine Shi. Sealed-Glass proofs: Using Transparent Enclaves to Prove and Sell Knowledge. In *Euro S&P 2017*.

[4] **Fan Zhang**, Ethan Cecchetti, Kyle Croman, Ari Juels, and Elaine Shi. Town crier: An authenticated data feed for smart contracts. In *CCS 16*, Vienna, Austria, October 2016.

[5] Florian Tramer, **Fan Zhang**, Ari Juels, Michael Reiter, and Thomas Ristenpart.

Stealing machine learning models via prediction APIs. In *USENIX Security 16*, Austin, TX, August 2016.

[6] Longqi Yang, Yin Cui, **Fan Zhang**, John P Pollak, Serge Belongie, and Deborah Estrin. Plateclick: Bootstrapping food preferences through an adaptive visual interface. In *Proceedings of the 24th ACM International on Conference on Information and Knowledge Management (CIKM)*. ACM, 2015.

Invited Talks

Town Crier

- Silicon Valley Ethereum Meetup, Santa Clara, CA. August, 2017
- IC3 Retreat, San Francisco, CA. March, 2017
- CCS'16, Vienna, Austria. October, 2016
- IC3 Retreat, New York City. May, 2016

Software Artifacts

[1] Town Crier: an Authenticated Data Feed For Smart Contracts
`http://github.com/bl4ck5un/Town-Crier`

[2] mbedtls-SGX: a SGX-friendly TLS stack (ported from mbedtls)
`https://github.com/bl4ck5un/mbedtls-SGX`

[3] Stealing Machine Learning Models via Prediction APIs
`https://github.com/ftramer/Steal-ML`

Teaching Experience

Part-time Teaching Assistant 2015, Fall
CS 5435: Security and Privacy in the Wild

Teaching Assistant 2015, Spring
CS5300: The Architecture of Large-scale Information Systems

Teaching Assistant 2014, Fall
CS4410: Operating Systems

Honors and Awards

Academic Excellence Scholarship 2013
from Tsinghua University

National Scholarship 2012
from the Ministry of Education of China

Freshman Scholarship 2010
from Tsinghua University