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A Billion Open Interfaces for Eve and Mallory: MitM, DoS, and Tracking Attacks on iOS and macOS Through Apple Wireless Direct Link
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Evaluating the Contextual Integrity of Privacy Regulation: Parents' IoT Toy Privacy Norms Versus COPPA123 Noah Apthorpe, Sarah Varghese, and Nick Feamster, <i>Princeton University</i>
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Hardware Security
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Origin-sensitive Control Flow Integrity

HardFails: Insights into Software-Exploitable Hardware Bugs
uXOM: Efficient eXecute-Only Memory on ARM Cortex-M
A Systematic Evaluation of Transient Execution Attacks and Defenses
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Why Do Adversarial Attacks Transfer? Explaining Transferability of Evasion and Poisoning Attacks
Stack Overflow Considered Helpful! Deep Learning Security Nudges Towards Stronger Cryptography
Planes, Cars, and Robots
Wireless Attacks on Aircraft Instrument Landing Systems
Please Pay Inside: Evaluating Bluetooth-based Detection of Gas Pump Skimmers
CANvas: Fast and Inexpensive Automotive Network Mapping
Losing the Car Keys: Wireless PHY-Layer Insecurity in EV Charging
RVFuzzer: Finding Input Validation Bugs in Robotic Vehicles through Control-Guided Testing425 Taegyu Kim, <i>Purdue University</i> ; Chung Hwan Kim and Junghwan Rhee, <i>NEC Laboratories America</i> ; Fan Fei, Zhan Tu, Gregory Walkup, Xiangyu Zhang, Xinyan Deng, and Dongyan Xu, <i>Purdue University</i>

Machine Learning, Adversarial and Otherwise
Seeing is Not Believing: Camouflage Attacks on Image Scaling Algorithms
CT-GAN: Malicious Tampering of 3D Medical Imagery using Deep Learning
Misleading Authorship Attribution of Source Code using Adversarial Learning
Terminal Brain Damage: Exposing the Graceless Degradation in Deep Neural Networks Under Hardware Fault Attacks
CSI NN: Reverse Engineering of Neural Network Architectures Through Electromagnetic Side Channel515 Lejla Batina, Radboud University, The Netherlands; Shivam Bhasin and Dirmanto Jap, Nanyang Technological University, Singapore; Stjepan Picek, Delft University of Technology, The Netherlands
Mobile Security 1
simTPM: User-centric TPM for Mobile Devices
The Betrayal At Cloud City: An Empirical Analysis Of Cloud-Based Mobile Backends
EnTrust: Regulating Sensor Access by Cooperating Programs via Delegation Graphs
PolicyLint: Investigating Internal Privacy Policy Contradictions on Google Play
50 Ways to Leak Your Data: An Exploration of Apps' Circumvention of the Android Permissions System
Side Channels
Spoiler: Speculative Load Hazards Boost Rowhammer and Cache Attacks

Robust Website Fingerprinting Through the Cache Occupancy Channel
Identifying Cache-Based Side Channels through Secret-Augmented Abstract Interpretation
SCATTERCACHE: Thwarting Cache Attacks via Cache Set Randomization
Pythia: Remote Oracles for the Masses
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Understanding iOS-based Crowdturfing Through Hidden UI Analysis
Crypto Means Cryptocurrencies
BITE: Bitcoin Lightweight Client Privacy using Trusted Execution
FASTKITTEN: Practical Smart Contracts on Bitcoin
StrongChain: Transparent and Collaborative Proof-of-Work Consensus
Tracing Transactions Across Cryptocurrency Ledgers
Intelligence and Vulnerabilities
Reading the Tea leaves: A Comparative Analysis of Threat Intelligence
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Looking from the Mirror: Evaluating IoT Device Security through Mobile Companion Apps
All Things Considered: An Analysis of IoT Devices on Home Networks
OS Security
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PeX: A Permission Check Analysis Framework for Linux Kernel
ERIM: Secure, Efficient In-process Isolation with Protection Keys (MPK)
SafeHidden: An Efficient and Secure Information Hiding Technique Using Re-randomization
Exploiting Unprotected I/O Operations in AMD's Secure Encrypted Virtualization
Phishing and Scams
Detecting and Characterizing Lateral Phishing at Scale
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Distributed System Security + Verifying Hardware
Protecting Cloud Virtual Machines from Hypervisor and Host Operating System Exploits
WAVE: A Decentralized Authorization Framework with Transitive Delegation
in-toto: Providing farm-to-table guarantees for bits and bytes
IODINE: Verifying Constant-Time Execution of Hardware
VRASED: A Verified Hardware/Software Co-Design for Remote Attestation
Crypto Means Cryptography
Mobile Private Contact Discovery at Scale
EverParse: Verified Secure Zero-Copy Parsers for Authenticated Message Formats
Blind Bernoulli Trials: A Noninteractive Protocol For Hidden-Weight Coin Flips
Xonn: XNOR-based Oblivious Deep Neural Network Inference
JEDI: Many-to-Many End-to-End Encryption and Key Delegation for IoT
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Birthday, Name and Bifacial-security: Understanding Passwords of Chinese Web Users
Protecting accounts from credential stuffing with password breach alerting

Probability Model Transforming Encoders Against Encoding Attacks
Cryptocurrency Scams
The Art of The Scam: Demystifying Honeypots in Ethereum Smart Contracts
The Anatomy of a Cryptocurrency Pump-and-Dump Scheme
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Less is More: Quantifying the Security Benefits of Debloating Web Applications
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No Right to Remain Silent: Isolating Malicious Mixes

On (The Lack Of) Location Privacy in Crowdsourcing Applications
Utility-Optimized Local Differential Privacy Mechanisms for Distribution Estimation
Evaluating Differentially Private Machine Learning in Practice
Fuzzing
FUZZIFICATION: Anti-Fuzzing Techniques
AntiFuzz: Impeding Fuzzing Audits of Binary Executables
MOPT: Optimized Mutation Scheduling for Fuzzers
EnFuzz: Ensemble Fuzzing with Seed Synchronization among Diverse Fuzzers
Grimoire: Synthesizing Structure while Fuzzing