The 47th Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2017)



Conference Program

Sponsored by:





Plaza Building

CONCOURSE LEVEL

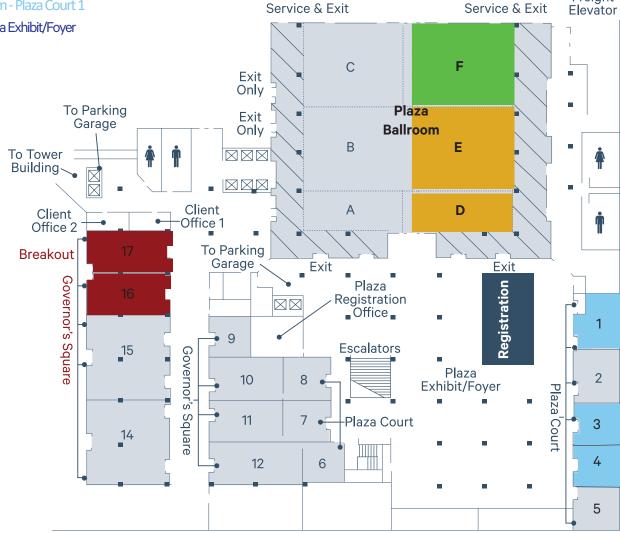
Breakouts - Covernor's Square 16 & 17 Breakouts - Plaza Court 3 & 4 Lunch - Plaza Ballroom F General Session - Plaza Ballroom D & E Committee Room - Plaza Court 1

Registration - Plaza Exhibit/Foyer



Meeting Room Locations

Freight



* Contact your hotel representative for additional capacities for rounds of 7 and/or 6.

This document contains approximate measurements and square footage that are for illustrative purposes only. We cannot guarantee the floor plan accuracy or completeness, therefore encourage you to review the space to make sure it is suitable for your event.

| | Monday, June 26, 2017 | | | |
|------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 8:00 – 17:00 | | Registration Location: Plaza Exhibit/Foyer | | |
| | SSIV Workshop | RADIANCE Workshop | Tutorial 1 | |
| 8:30 – 10:00 | <u>The 3rd International</u> <u>Workshop on Safety and</u> <u>Security of Intelligent</u> <u>Vehicles</u> | International Workshop on Recent Advances in the Dependability Assessment of Complex systems | <u>A practical view</u> <u>of modeling and</u> <u>quantification of</u> <u>network</u> <u>survivability</u> | |
| | Location: Governors Square 16 | Location: Governors Square 17 | Location: Plaza Court 3 | |
| 10:00 – 10:30 | | Coffee Break | | |
| | | Location: Plaza Exhib | | |
| 10:30 – 12:00 | SSIV Workshop | RADIANCE Workshop | Tutorial 1 | |
| 12:00 – 13:30 | | Lunch <u>Location</u> : Plaza Ballr | oom F | |
| 13:30 – 15:00 | SSIV Workshop | RADIANCE Workshop | Tutorial 1 | Tutorial 2LLFI and the Art of Fault InjectionLocation:Location:Plaza Court 4 |
| 15:00 – 15:30 | | Coffee Break | | |
| 15:30 – 17:00 | SSIV Workshop | RADIANCE Workshop | Tutorial 1 | Tutorial 2 |
| 17:30 – 19:30 | Conference Reception Location: Plaza Exhibit/Foyer | | | |

| | Tuesday, June 27, 2017 | | |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 8:00 – 17:00 | Registration <u>Location</u> : Plaza Exhibit/Foyer | | |
| 8:30 - | Opening remarks and Jean-Claude Laprie award presentation | | |
| 9:15 | Location: Plaza Ballroom D & E | | |
| 9:15 - 10:15 | Keynote I The Cybersecurity Imperative Farnam Jahanian, University Provost and Chief Academic Officer, Carnegie Mellon University Location: Plaza Ballroom D & E Chair: Paulo Verissimo | | |
| 10:15 – 10:45 | Coffee Break | | |

| 10:45 – 12:15 | Session 1: Best Paper Award Candidates Location: Plaza Ballroom D & E Chair: Pascal Felber and Evgenia Smirni Information Leakage in Encrypted Deduplication via Frequency Analysis Jingwei Li (University of Electronic Science and Technology of China); Chuan Qin, Patrick P. C. Lee (The Chinese University of Hong Kong); Xiaosong Zhang (University of Electronic Science and Technology of China) Privacy Disclosure Through Smart Meters: Reactive Power Based Attack and Defense Jingyao Fan (The Pennsylvania State University); Qinghua Li (University of Arkansas); Guohong Cao (The Pennsylvania State University) What Can We Learn from Four Years of Data Center Hardware Failures? Guosai Wang, Wei Xu (Institute for Interdisciplinary Information Sciences, Tsinghua University) |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12:15 – 13:45 | Lunch |
| | Location: Plaza Ballroom F |

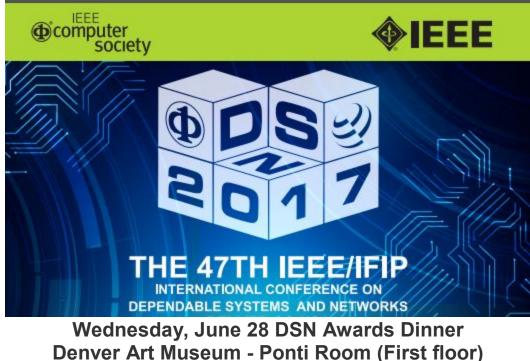
| | Session 2A: Algorithms | Session 2B: Hardware | Session 2C: Fast Abstracts |
|---------|-------------------------------|-----------------------------------|--------------------------------------|
| | and Agreement | Location: Governors Square 16: | Location: Governors Square |
| | Location: Plaza Ballroom | <u>Chair</u> : Devesh Tiwari | <u>17:</u> |
| | <u>D&E</u> | | Chair: Matti Hiltunen |
| | <u>Chair:</u> Paulo Verissimo | Reducing the "Tax" of | |
| | | Reliability: A Hardware- | Software-Defined HoneyNet: |
| | Fast Atomic Multicast | Aware Method for Agile Data | Towards Mitigating Link |
| | Paulo Coelho (University of | Persistence in Mobile Devices | Flooding Attacks |
| | Lugano); Nicolas Schiper | Meng Wang, Huxiang Chen | Jinwoo Kim and Seungwon |
| | (EPFL); Fernando Pedone | (University of Florida); Tao Li | Shin |
| | (University of Lugano) | (NSF/University of Florida) | TDSC: Two-Stage DDoS |
| | | | Detection and Defense |
| | Speeding up Consensus by | Exploring the Potential for | System Based on Clustering |
| | Chasing Fast Decisions | Collaborative Data | Shuang Wei, Yijing Ding, and |
| | Balaji Arun, Sebastiano | Compression and Hard-Error | Xinhui Han |
| | Peluso, Roberto Palmieri, | Tolerance in Resistive | The Many Conflicting |
| | Giuliano Losa, Binoy | Memories | Visions of 'Safety Case' |
| | Ravindran (Virginia Tech) | Amin Jadidi, Mohammad | Patrick J. Graydon |
| | | Arjomand (Pennsylvania State | RFID Tag Grouping |
| | Secure Causal Atomic | University); Mohammad | Protocols Made Private |
| | Broadcast, Revisited | Khavari Tavana, David Kaeli | |
| 13:45 - | Sisi Duan (Oak Ridge | (Northeastern University); | Yudai Komori, Kazuya Sakai, |
| 15:15 | National Laboratory); | Mahmut Kandemir, Chita Das | and Satoshi Fukumoto |
| 13.15 | Michael K. Reiter | (Pennsylvania State University) | Off-Path Caching for File |
| | | (Femisylvania State University) | Versioning in Named Data |
| | (University of North | One Dit is (Not) Enough. An | Networking |
| | Carolina at Chapel Hill); | One Bit is (Not) Enough: An | Mamoru Ohara and Satoshi |
| | Haibin Zhang (University of | Empirical Study of the Impact | Fukumoto |
| | Connecticut) | of Single and Multiple Bit-Flip | Portable SDN Testbed |
| | | Errors | Prototype |
| | | Behrooz Sangchoolie (Chalmers | Josh Alcorn, Scott Melton, and |
| | | University of Technology); | C. Edward Chow |
| | | Karthik Pattabiraman | A Framework for SDN |
| | | (University of British | Network Evaluation |
| | | Columbia); Johan Karlsson | Josh Alcorn, Scott Melton, and |
| | | (Chalmers University of | C. Edward Chow |
| | | Technology) | Document Faults: An |
| | | | Extension of the Taxonomy |
| | | | of Dependable and Secure |
| | | | Computing |
| | | | Algirdas Avižienis |
| | | | Opportunities and |
| | | | Challenges of Third-Party |
| | | | Sustainment of Critical |
| | | | Software in Dependable |
| | | | - |
| | | | Systems Kata Cill and Dah Ashmara |
| | | | Kate Gill and Rob Ashmore |

| 15:15 – 15:45 | | Coffee Break | |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15.45 | Lo | | /e r |
| 15:45 - 17:15 | Loc Session 3A: Symbolic Execution and Synthesis Tools Location: Plaza Ballroom D & E Chair: Gilles Muller StatSym: Vulnerable Path Discovery through Statistics- guided Symbolic Execution Fan Yao, Yongbo Li, Yurong Chen, Hongfa Xue, Guru Venkataramani, Tian Lan, (The George Washington University) Dependability-aware design space exploration for optimal synthesis parameters tuning Ilya Tuzov, Juan Carlos Ruiz, David de Andres (ITACA- UPV) pbSE: Phase-based Symbolic Execution QixueXiao, YuChen (Tsinghua University); ChenggangWu (Institute of Computing Technology Chinese Academy of Sciences); KangLi (Dept. of Computer Science Athens, Georgia) | Session 3B:TrustedExecutionLocation: Governors Square 16Chair:Bojan CukicIM-Visor:A Pre-IME Guardto Prevent IME Apps fromStealing Sensitive KeystrokesUsing TrustZoneChen Tian, Yazhe Wang (StateKey Laboratory of InformationSecurity, Institute ofInformation Engineering,Chinese Academy of Sciences);Peng Liu (College ofInformation Sciences andTechnology, Pennsylvania StateUniversity, University Park);Qihui Zhou, Chengyi Zhang(State Key Laboratory ofInformation Engineering,Chinese Academy of Sciences)Peng Liu (College ofInformation Sciences andTechnology, Pennsylvania StateUniversity, University Park);Qihui Zhou, Chengyi Zhang(State Key Laboratory ofInformation Engineering,Chinese Academy of Sciences)Rollback and ForkingDetection for TrustedExecution Environmentsusing Lightweight CollectiveMemoryMarcus Brandenburger,Christian Cachin (IBMResearch - Zurich); MatthiasLorenz, Rüdiger Kapitza (TUBruno Vavala (CarnegieMellon University (U.S.) &University of Lisbon(Portugal)); Nuno Neves(University of Lisbon(Portugal)); Peter Steenkiste(Carnegie Mellon University(U.S.)) | RefSession 3C: Industry Track I: Architecture and Evaluation of (Dependable) Systems and Networks Location: Governors Square 17 Chair: Cristian ConstantinescuInvited Talk: Robert Baumann, Texas Instruments The Space Radiation Environment and Component Mitigation Techniques for Dependable Space SystemsRT Level vs. Microarchitecture Level Reliability Assessment: Case Study on ARM Cortex-A9 CPU Athanasios Chatzidimitriou, Manolis Kaliorakis, Dimitris Gizopoulos, Maurizio Iacaruso, Mauro Pipponzi, Riccardo Mariani and Stefano Di Carlo.Exact Reliability Computation Thanikesavan Sivanthi, Yvonne-Anne Pignolet and Vincent Débieux. |

| | Wednes | day, June 28, 2017 | |
|------------------|-----------------------------------------------------------------|----------------------------------------------------|------------------------------------------------|
| | | Registration | |
| 8:00 - 17:00 | Locati | on: Plaza Ballroom Exhibit/Foyer | |
| 17.00 | Keynote II | | |
| | | | |
| 8:30 - | A Decade of Self-Driving Cars Bryan Salesky, CEO, Argo AI | | |
| 9:30 | Bryan Salesky, CEO, Argo Ar | | |
| | Location: Plaza Ballroom D & E | | |
| 9:30 - | Chair: Shivakant Mishra Carter Award Presentation | | |
| 9:30 – 10:00 | | | |
| 10:00 - | Location: Plaza Ballroom D & E | Coffee Break | |
| 10:30 | Logati | on: Plaza Ballroom Exhibit/Foyer | |
| 10:20 | | - | Section 4C: Indu 4 |
| 10:30 - 12:00 | Session 4A: Binaries Location: Plaza Ballroom D & E | Session 4B: Cloud Location: Governors Square 16 | <u>Session 4C:</u> Industry Track II: Cloud |
| 12.00 | <u>Chair: Saman Zonouz</u> | Chair: Fernando Pedone | Computing and the |
| | <u>Chair</u> . Saman Zonouz | <u>Chan</u> . Fernando Fedorie | Internet of Things (IoT) |
| | Practical Experience Report | Multimodal Indexable | Location: Governors |
| | Concolic Execution on Small- | Encryption for Mobile Cloud- | Square 17 |
| | Size Binary Codes: Challenges | based Applications | Chair: Karthik |
| | and Empirical Study | Bernardo Ferreira, João Leitão, | Pattabiraman |
| | Hui Xu (CUHK); Yangfan | Henrique Domingos (FCT/UNL | |
| | Zhexceou, Yu Kang (Fudan | & NOVA LINCS) | Invited talk: Ben Zorn, |
| | University); Michael R Lyu | | Microsoft |
| | (CUHK) | Secure Live Migration of | Technical Disruption , |
| | | SGX Enclaves on Untrusted | Agility, and |
| | Towards Automated Discovery | Cloud | Dependability |
| | of Crash-Resistant Primitives in | Jinyu Gu, Zhichao Hua, Yubin | |
| | Binaries | Xia, Haibo Chen (Shanghai Jiao | Providing Resiliency to |
| | Benjamin Kollenda (Ruhr- | Tong University); Binyu Zang | Orchestration and |
| | Universität Bochum); Enes | (Shanghai Jiao Tong | Automation Engines in |
| | Goktas (Vrije Universiteit | University); Haibing Guan | Hybrid Cloud |
| | Amsterdam); Tim Blazytko, | (Shanghai Jiao Tong | Long Wang, Harigovind |
| | Philipp Koppe, Robert Gawlik | University); Jinming Li | Ramasamy, Alexei Karve |
| | (Ruhr-Universität Bochum); R.K. | (Huawei) | and Rick Harper. |
| | Konoth, Cristiano Giuffrida, Herbert Bos (Vrije Universiteit | ContainerLeaks: Emerging | Uptime-Optimized Cloud |
| | Amsterdam); Thorsten Holz | Security Threats of | Architecture as a |
| | (Ruhr-Universität Bochum) | Information Leakages in | Brokered Service |
| | | Container Clouds | Sreekrishnan |
| | Function Interface Analysis: A | Xing Gao (College of William | Venkiteswaran and |
| | Principled Approach for | and Mary); Zhongshu Gu, | Santonu Sarkar. |
| | Function Recognition in COTS | Mehmet Kayaalp, Dimitrios | |
| | Binaries | Pendarakis (IBM T.J. Watson | |
| | Rui Qiao, R Sekar (Stony Brook | Research Center); Haining | |
| | University) | Wang (University of Delaware) | |

| 12:00 - | | Lunch | |
|---------|-------------------------------------|------------------------------------------------------------|----------------------------------|
| 13:30 | | | |
| | | Location: Plaza Ballroom F | |
| 13:30 - | Session 5A: Anomaly Detection | Session 5B: Wireless and | Session 5C: Industry |
| 15:00 | Location: Plaza Ballroom D & E | Sensors | Track III: Dependability |
| | Chair: Patrick Lee | Location: Governors Square 16 | Data and Security |
| | | Chair: Saurabh Bagchi | Location: Governors |
| | Athena: A Framework for | | Square 17 |
| | Scalable Anomaly Detection in | Towards Secure and | <u>Chair:</u> Alan Wood |
| | Software-Defined Networks | Verifiable Database-driven | |
| | Seunghyeon Lee, Jinwoo Kim, | Spectrum Sharing | Enhancing Anomaly |
| | Seungwon Shin (KAIST); Phillip | Zhili Chen (Anhui University); | Diagnosis of Automatic |
| | Porras, Vinod Yegneswaran (SRI | Lin Chen (University of Paris- | Train Supervision |
| | International) | Sud); Hong Zhong (Anhui University) | System Based on Operation Log |
| | Bloom Filters and LSTM | Oniversity) | Yan Li, Binbin |
| | Networks For Multi-level | Sensor-based Implicit | Chen, Vincent W. Zheng, |
| | Anomaly Detection in | Authentication of | William Temple, Zbigniew |
| | Industrial Control Systems | Smartphone Users | Kalbarczyk and Yue Wu. |
| | Cheng Feng, Tingting Li, Deeph | Wei-Han Lee, Ruby Lee | |
| | Chana (Institute for Security | (Princeton University) | Automating DRAM |
| | Science and Technology, Imperial | | Fault Mitigation By |
| | College London) | REMAX: Reachability- | Learning From |
| | | Maximizing P2P Detection of | Experience |
| | Revisiting Random Walk based | Erroneous Readings in | Elisabeth Baseman, |
| | Sybil Detection in Online Social | Wireless Sensor Networks | Nathan Debardeleben, |
| | Networks | Varun Badrinath Krishna, | Kurt Ferreira, Vilas |
| | Jinyuan Jia, Neil Zhenqiang Gong | Michael J. Rausch, Benjamin E. | Sridharan, Taniya |
| | (Iowa State University) | Ujcich, Indranil Gupta, William | Siddiqua and Olena Tkachenko. |
| | | H. Sanders (University of Illinois at Urbana-Champaign) | і каспепко. |
| | | minois at Orbana-Champaigh) | HYDRA: HYbrid Design |
| | | | for Remote Attestation |
| | | | (Using a Formally |
| | | | Verified Microkernel) |
| | | | Karim Eldefrawy, |
| | | | Norrathep Rattanavipanon |
| | | | and Gene Tsudik. |
| | | | |
| | | | MAS: Mobile-Apps |
| | | | Assessment and Analysis |
| | | | System |
| | | | Chin-Wei Tien, Chia-Wei |
| | | | Tien, Tse-Yung Huang, |
| | | | Ting-Chun Huang, Wei- |
| | | | Ho Chung and Sy-Yen |
| | | | Kuo |
| | | | A Visit to the Jungle of |
| | | | Terminology |
| | | | Algirdas Avizienis |
| | I | | |

| 15:00 - | | | |
|---------------|---------------------------------------------------------|-------------------------------------|------------------------------|
| 15:30 | | Coffee Break | |
| 15.50 | | | |
| | Loc | cation: Plaza Ballroom Exhibit/Foy | <u>ver</u> |
| 15:30 - | Session 6A: Dependable | Session 6B: Measurement | Session 6C: Student Forum |
| 17:00 | Systems and Software | Studies | Location: Governors Square |
| | Location: Plaza Ballroom D & | Location: Governors Square 16 | <u>17</u> |
| | E | Chair: Chuan Yue | Chair: Saurabh Bagchi |
| | Chair: Domenico Cotroneo | | _ |
| | | Counting in the Dark: Caches | Modeling Error |
| | Agora: A Dependable High- | Discovery and Enumeration | Propagation in Programs |
| | Performance Coordination | in the Internet | Guanpeng Li, |
| | Service for Multi-Cores | Amit Klein, Haya Shulman, | University of British |
| | Rainer Schiekofer (Friedrich- | Michael Waidner (Fraunhofer | Columbia, Canada |
| | Alexander-Universität | SIT) | |
| | Erlangen-Nürnberg); Johannes | | Automated Program |
| | Behl (TU Braunschweig); | Entropy-Based Security | Diversity using Program |
| | Tobias Distler (Friedrich- | Analytics: Measurements | Synthesis |
| | Alexander-Universität | from a Critical Information | Abraham Chan, |
| | Erlangen-Nürnberg) | System | University of British |
| | | Marcello Cinque, Raffaele | Columbia, Canada |
| | Load-Optimal Local Fast | Della Corte, Antonio Pecchia | |
| | Rerouting for Dependable | (Federico II University of | Evaluation of the |
| | Networks | Naples, Italy) | dependability of critical |
| | Yvonne-Anne Pignolet (ABB | | infrastructures using hybrid |
| | Research, Switzerland); Stefan | Exploring the Long Tail of | Petri nets with random |
| | Schmid (Aalborg Uni, | (Malicious) Software | variables and stochastic |
| | Denmark & TU Berlin, | Downloads | simulation |
| | Germany); Gilles Tredan | Babak Rahbarinia (Auburn | Carina Pilch, |
| | (LAAS, CNRS, Toulouse, | University Montgomery); | Institute of Mathematics and |
| | France) | Marco Balduzzi (Trend Micro | Computer Science, Munster, |
| | | Inc.); Roberto Perdisci | Germany |
| | JMake: Dependable | (University of Georgia) | |
| | Compilation for Kernel | | Enabling Low Degraded |
| | Janitors | | Read Latency and Fast |
| | Julia Lawall, Gilles Muller | | Recovery for Erasure |
| | (Sorbonne | | Coded Cloud Storage |
| | Universites/Inria/UPMC/LIP6) | | Systems |
| | | | Peng Li, |
| | | | Nankai University, China |
| 17.20 | | | |
| 17:30 - 21:00 | TT 14 1 T | Conference Banquet | had Damatica I |
| 21:00 | Visit to Denver Art Museum and Dinner – Ticket Required | | |
| | Walking departure from hotel (5:15pm) | | |



Denver Art Museum - Ponti Room (First floor 100 W. 14th Ave Pkwy, Denver CO 80204 5:30 PM – 9:00 PM *Ticket required*

The Denver Art Museum is a short walk from the Sheraton hotel. <u>Please be sure to bring your ticket for the event</u> <u>and make your meal selection in advance.</u> Meet in the hotel lobby at 5:00 PM for on-time walking departure at 5:15 PM. The gallery we will have access to is the American Indian Gallery on the 3rd floor of the North building. Once you arrive at Ponti Hall for the event, see the elevator bank from Ponti Hall and take the elevator to the 3rd floor to access the gallery.



Walking directions from the Sheraton to the Denver Art Museum:

- 1. Head SOUTHWEST on COURT PL toward 15th St
- 2. Turn LEFT onto 15th St
- 3. Turn RIGHT when you hit Colfax, cross Colfax and enter Civic Center Park
- 4. Head SOUTH through Civic Center Park toward 14th Ave
- 5. Cross 14th Ave, you'll see the Denver Art Museum on the RIGHT
- 6. Enter the NORTH Entrance of the Museum (pictured below)



| | Thurs | day, June 29, 2017 | |
|--------|------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------|
| 8:00 - | | Registration | |
| 16:00 | | itegisti attori | |
| | Loca | ation: Plaza Ballroom Exhibit/Foy | /er |
| 8:30 - | Session 7A: Android | Session 7B: Privacy and | Session 7C: Best of SELSE |
| 10:00 | Location: Plaza Ballroom D&E | Security | Location: Governors Square |
| | Chair: Marco Vieira | Location: Governors Square | 17 |
| | | <u>16</u> | <u>Chair:</u> Alan Wood |
| | Ghost Installer in the | Chair: Sonia Ben Mokhtar | |
| | Shadow: Security Analysis of | | Evaluation and Mitigation |
| | App Installation on Android | I know nothing about you | of Soft Errors in Neural |
| | Yeonjoon Lee (Indiana | but here is what you might | Network-based Object |
| | University); Tongxin Li | like | Detection in Three GPU |
| | (Peking University); Nan Zhang | Rachid Guerraoui (EPFL); | Architectures |
| | (Indiana University); Soteris | Anne-Marie Kermarrec (Inria); Rhicheek Patra (EPFL); | Fernando Fernandes dos Santos, Lucas Draghetti, |
| | Demetriou (University of Illinois at Urbana-Champaign); | Mahammad Valiyev (TU | Lucas Weigel, Luigi Carro, |
| | Mingming Zha (Chinese | Munich); Jingjing Wang | Philippe Navaux, and Paolo |
| | Academy of Sciences); | (EPFL) | Rech (Instituto de |
| | XiaoFeng Wang (Indiana | | Informatica, Universidade |
| | University); Kai Chen (Chinese | What You See is Not What | Federal do Rio Grande do |
| | Academy of Sciences); | You Get! Thwarting Just-in- | Sul, Porto Alegre, Rio |
| | Xiaoyong Zhou (Samsung | Time ROP with Chameleon | Grande do Sul, Brasil) |
| | Research); Xinhui Han (Peking | Ping Chen, Jun Xu | |
| | University); Michael Grace | (Pennsylvania State | DRAM Scaling Error |
| | | University); Zhisheng Hu | Evaluation Model Using |
| | DyDroid : Measuring | (Pennsylvania State | Various Retention Time |
| | Dynamic Code Loading and | University); Xinyu Xing | Seong-Lyong Gong (UT |
| | Its Security Implications in Android Applications | (Pennsylvania State University); Minghui Zhu | Austin), Jungrae Kim (Microsoft), and Mattan Erez |
| | Zhengyang Qu (Northwestern | (Pennsylvania State | (UT Austin) |
| | University); Shahid Alam | University); Bing Mao | (01 Austin) |
| | (Qatar University); Yan Chen | (Nanjing University); Peng | Deep Healing: Ease the BTI |
| | (Northwestern University); | Liu (Pennsylvania State | and EM Wearout Crisis by |
| | Xiaoyong Zhou (Google); | University) | Activating Recovery |
| | Wangjun Hong (Northwestern | • | Xinfei Guo and Mircea R. |
| | University); Ryan Riley (Qatar | DynaMiner: Leveraging | Stan (Department of |
| | University) | Offline Infection Analytics | Electrical and Computer |
| | | for On-the-Wire Malware | Engineering, University of |
| | JGRE: An Analysis of JNI | Detection | Virginia) |
| | Global Reference Exhaustion | Birhanu Eshete, V.N. | |
| | Vulnerabilities in Android Yacong Gu (Chinese Academy | Venkatakrishnan (University of Illinois at Chicago) | |
| | of Sciences); Kun Sun (George | or minors at Cilicago) | |
| | Mason University); Purui Su | | |
| | (Chinese Academy of | | |
| | Sciences); Qi Li (Tsinghua | | |
| | University); Yemian Lu, | | |
| | Lingyun Ying, Dengguo Feng | | |
| | (Chinese Academy of Sciences) | | |

| 10:00 - | | | |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 - | | Coffee Break | |
| 10.50 | | | |
| | | cation: Plaza Ballroom Exhibit/Foy | /er |
| | • | | |
| 10:30 - 12:00 | Session 8A: Analytic ModelsLocation: Plaza Ballroom D &EChair: Eric RozierStatistical Model Checkingfor hybrid Petri Nets withmultiple general transitionsCarina Pilch, Anne Remke(Westfälische Wilhelms-Universität Münster)Deadline-Aware MultipathCommunication: AnOptimization ProblemLaurent Chuat, Adrian Perrig(ETH Zurich); Yih-Chun Hu(University of Illinois atUrbana-Champaign)Attacker-Induced TrafficFlow Instability in a Streamof Semi-Automated VehiclesDaniel D. Dunn, Samuel A.Mitchell, Imran Sajjad (UtahState University); Ryan M.Gerdes (Virginia Tech);Rajnikant Sharma (Universityof Cincinnati); Ming Li(University of Arizona) | Session 8B:Power Systemand Smart GridLocation:Governors Square 16Chair:Felicita DiGiandomenicoPractical Experience ReportSmart Maintenance viaDynamic Fault Tree Analysis:A Case Study on SingaporeMRT SystemYan Liu, Yue Wu (AdvancedDigital Science Center);Zbigniew Kalbarczyk(University of Illinois atUrbana-Champaign)RL-BLH:Learning-BasedBattery Control for CostSavings and PrivacyPreservation for SmartMetersJinkyu Koo, Xiaojun Lin,Saurabh Bagchi (PurdueUniversity)Compromising Security ofEconomic Dispatch in PowerSystem OperationsDevendra Shelar(Massachusetts Institute ofTechnology); Pengfei Sun(Rutgers University); SaurabhAmin (Massachusetts Institute | Session 8C:Tool/Demo:Security and Testing ToolsLocation:Governors Square17Chair:Rick SchlichtingFex:Fex:A Software SystemsEvaluatorOleksii Oleksenko, DmitriiKuvaiskii, Pramod Bhatotia,Christof Fetzer (TU Dresden)Demonstrating a Tool forInjection Attack Preventionin MySQLIbéria Medeiros (LaSIGE,Faculdade de Ciências daUniversidade de Lisboa);Miguel Beatriz (INESC-ID,Instituto Superior Técnico daUniversidade de Lisboa);Nuno Neves (LaSIGE,Faculdade de Ciências daUniversidade de Lisboa);Nuno Neves (LaSIGE,Faculdade de Ciências daUniversidade de Lisboa);Miguel Correia (INESC-ID,Instituto Superior Técnico daUniversidade de Lisboa);Miguel Correia (INESC-ID,Instituto Superior Técnico daUniversidade de Lisboa)Miguel Correia (INESC-ID,Instituto Superior Técnico daUniversidade de Lisboa)Zipr: Efficient Static BinaryRewriting for SecurityWilliam Hawkins, Jason D.Hiser, Michele Co, AnhNguyen-Tuong, Jack W.Davidson (University of |
| | | of Technology); Saman Zonouz (Rutgers University) | Virginia) |
| 12:00 - | | Lunch | |
| 13:30 | | Location: Plaza Ballroom F | |

| | Session 0.4. Attacks | Session OD: Drotocol and | |
|------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 13:30 – 15:00 | Session 9A: Attacks | Session 9B: Protocol and | |
| 13.00 | Location: Plaza Ballroom D & | Behavioral Analysis | |
| | | Location: Governors Square 16 | |
| | <u>Chair</u> : Karthik Pattabiraman | <u>Chair</u> : Yair Amir | |
| | | | |
| | ATTAIN: An Attack | Analysing Selfishness | |
| | Injection Framework for | Flooding with SEINE | |
| | Software-Defined | Guido Lena Cota (Università | |
| | Networking | degli Studi di Milano); Sonia | |
| | Benjamin E. Ujcich, Uttam | Ben Mokhtar (LIRIS-CNRS- | |
| | Thakore, William H. Sanders | INSA Lyon); Gabriele Gianini | |
| | (University of Illinois at | (Università degli Studi di | |
| | Urbana-Champaign) | Milano); Julia Lawall, Gilles | |
| | | Muller (Sorbonne Universités, | |
| | The Balance Attack Against | Inria, CNRS, UPMC, LIP6); | |
| | Proof-Of-Work Blockchains: | Ernesto Damiani (Università | |
| | The R3 Consortium as an | degli Studi di Milano, | |
| | Example | EBTIC/Khalifa University); | |
| | Christopher Natoli, Vincent | Lionel Brunie (LIRIS-CNRS- | |
| | Gramoli (Data61-CSIRO and | INSA Lyon) | |
| | University of Sydney) | | |
| | | Detecting Passive Cheats in | |
| | Voiceprint: A Novel Sybil | Online Games via | |
| | Attack Detection Method for | Performance-Skillfulness | |
| | VANETs | Inconsistency | |
| | Yuan Yao (Northwestern | Daiping Liu (University of | |
| | Polytechnical University); Bin | Delaware); Xing Gao (College | |
| | Xiao (The Hong Kong | of William and Mary); | |
| | Polytechnic University); | Mingwei Zhang (Intel Labs); | |
| | Gaofei Wu (Northwestern | Haining Wang (University of | |
| | Polytechnical University); Xue | Delaware); Angelos Stavrou | |
| | | | |
| 1 | Liu (McGill University) | | |
| | Liu (McGill University); Zhiwen Yu, Kailong Zhang | (George Mason University) | |
| | Zhiwen Yu, Kailong Zhang, | (George Mason University) | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational | |
| | Zhiwen Yu, Kailong Zhang, | (George Mason University) Analyzing Operational Behavior of Stateful Protocol | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue University); Omar Chowdhury | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue University); Omar Chowdhury (University of Iowa); Sze Yiu | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue University); Omar Chowdhury (University of Iowa); Sze Yiu Chau (Purdue University); | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue University); Omar Chowdhury (University of Iowa); Sze Yiu Chau (Purdue University); Cristina Nita-Rotaru | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue University); Omar Chowdhury (University of Iowa); Sze Yiu Chau (Purdue University); Cristina Nita-Rotaru (Northeastern University); | |
| | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue University); Omar Chowdhury (University of Iowa); Sze Yiu Chau (Purdue University); Cristina Nita-Rotaru | |
| 15.15 | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern Polytechnical University) | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue University); Omar Chowdhury (University of Iowa); Sze Yiu Chau (Purdue University); Cristina Nita-Rotaru (Northeastern University); | |
| 15:15 - | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern Polytechnical University) | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue University); Omar Chowdhury (University of Iowa); Sze Yiu Chau (Purdue University); Cristina Nita-Rotaru (Northeastern University); Ninghui Li (Purdue University) | |
| 15:15 – 16:15 | Zhiwen Yu, Kailong Zhang, Xingshe Zhou (Northwestern Polytechnical University) | (George Mason University) Analyzing Operational Behavior of Stateful Protocol Implementations for Detecting Semantic Bugs Endadul Hoque (Purdue University); Omar Chowdhury (University of Iowa); Sze Yiu Chau (Purdue University); Cristina Nita-Rotaru (Northeastern University); Ninghui Li (Purdue University) | |