Sunday, December 1, 2019	
Time	Event
17:30 – 20:00	Reception & Registration (Venue: Rihga Royal Hotel Kyoto, 2nd floor, Room Salon De Charme)

Monday, December 2, 2019		
Time	Event	
08:00 – 10:15	Registration (2nd floor, outside Room Shunju 1)	
09:00 – 09:15	Opening (2nd floor, Room Shunju 1)	
09:15 – 10:15	Keynote Chair: S. Fukumoto Prof. Xavier Défago (Tokyo Institute of Technology, Japan) Dependability and Fault-Tolerance of Cooperative Mobile Robots: The Gap Between Theory and Pragmatism	
10:15 – 17:00	Registration (1st floor, Group reception desk)	
10:15 – 10:45	Break	
10:45 – 11:45	**Session 1A (Security I: 2nd floor, Room Le Bois)** Chair: Jin Hong Thomas Rosenstatter, Christian Sandberg and Tomas Olovsson Extending AUTOSAR's Counter-based Solution for Freshness of Authenticated Messages in Vehicles Huichen Lin, Dong Seong Kim and Neil Bergmann. SAGA: Secure Auto-configurable Gateway Architecture for Smart Home	**Session 1B (Fast Abstracts I: 1st floor, Room Le Cygne)** Chair: Masato Kitakami Shinji Inoue, Takaji Fujiwara and Shigeru Yamada, Estimation of Target Failure Measures for E/E/PE Safety-Related Software Toshinori Sato and Tomoaki Ukezono, Evaluation on Configurable Approximate Circuit for Aging-Induced Timing Violation Tolerance David William Honorio Araujo da Silva, Carlos Paz de Araujo and Edward Chow, Fully Homomorphic Key Update and Key Exchange Over Exterior Product Spaces For Cloud Computing Applications Chien-Fu Cheng and Chu-Chiao Hsu, A Fault-tolerant Consensus Protocol for Software-Defined Networks Tomohiko Takagi, Ryo Kurozumi and Tetsuro Katayama, State Transition Tuple Coverage Criterion for Extended Place/Transition Net-Based Testing Shuhei Ota and Mitsuhiro Kimura, Reliability modeling of coherent systems with dependent components due to common factors
11:45 – 12:00	Break	
12:00 – 13:00	Lunch (2nd floor, Shunju 3)	
13:00 – 14:00	**Session 2A (Cloud System: 2nd floor, Le Bois)** Chair: Fumio Machida Satoshi Konno and Xavier Défago Approximate QoS Rule Derivation Based on Root Cause Analysis for Cloud Computing Adriano Serckumecka, Ibéria Medeiros, Bernardo Ferreira and Alysson Bessani SLiCER: Safe Long-term Cloud Event Archival	**Session 2B (Fast Abstracts II: 1st floor, Room Le Cygne)** Chair: Achour Mostéfaoui Naoki Torii and Masato Kitakami, A Method for Stable Block Generation Time in Proof of Work Tao Wang, Jianhui Jiang and Zhen Wang, Reliability Estimation of Approximate Circuits Based on Probabilistic Gate Model Koichi Bando and Kenji Tanaka, Attempt to Extract Similar Cases by Applying Multilayer Perceptron to a Failure Database Toshiyuki Fujikura and Ryo Kurachi, An Attack Scenario Generation Method Using the Behavior Model Xuheng Duan, Haochen Pan, Lewis Tseng and Yingjian Wu, BBB: Make Benchmarking Blockchains Configurable and Extensible Xiao Cao, Uniform Consensus Prone to Omission Failures with Fault Knowledge
14:00 – 14:30	Break	
14:30 – 15:30	**Session 3A (Software I: 2nd floor, Le Bois)** Chair: Naohiro Hayashibara Keita Suzuki, Takafumi Kubota and Kenji Kono Detecting and Analyzing Year 2038 Problem Bugs in Userlevel Applications Ulrich Thomas Gabor, Daniel Ferdinand Siegert and Olaf Spinczyk High-Accuracy Software Fault Injection in Source Code with Clang	**Session 3B (Fast Abstracts III: 1st floor, Room Le Cygne)** Chair: Lewis Tseng Li Xin Tan, Jing Wei Shannen Wee, Jun Rong Chan, Wei Jie Soh and Chern Nam Yap, Integrate Dragonfly Key Exchange (IETF – RFC 7664) into Arithmetic Circuit Homomorphic Encryption Joon Han and Dennis Wong, SNudge: A Slidebar Nudge for Users to Practice Better Habits For Mobile Fingerprint Authentication Yutaro Yoshikawa and Masayuki Arai, A Fine-Grained SDN Rule Table Partitioning and Distribution Qian Wang, Jianhui Jiang and Long Li, A Reliability Automatic Assessment Framework for Open Source Software Xuze Xia, Jianhui Jiang, and Wei Zhang, Ensemble Methods for Anomaly Detection Based on System Log
15:30 – 16:00	Break	
16:00 – 17:30	Panel discussion (Safety 2.0 – Safety in the next era: 2nd floor, Room Shunju 1) Coordinator: Nobuyasu Kanekawa Panellists: Masao Mukaidono, Masao Dohi, Hiroo Kanamaru	
18:00 – 20:30	Banquet (2nd floor, Room Shunju 3)	

Tuesday, December 3, 2019		
Time	Event	
08:00 – 16:30	Registration (1st floor, Group reception desk)	
09:00 – 10:00	**Session 4A (Dependable Network: 2nd floor, Room Le Bois)** Chair: Xavier Defago Lewis Tseng, Zezhi Wang and Yajie Zhao Resilient Distributed Causal Memory in Client-Server Model Kenta Hanada, Tatsuhiro Tsuchiya and Yasumasa Fujisaki Satisfiability-Based Analysis of Cascading Failures in Systems of Interdependent Networks	**Session 4B (Fast Abstracts IV: 1st floor, Room Le Cygne)** Chair: Mitsuhiro Kimura Xueling Zhang, Rocky Slavin, Xiaoyin Wang and Jianwei Niu, Privacy Assurance for Android Augmented Reality Apps Mamoru Ohara, A Study on Checkpointing for Distributed Applications Using Blockchain-Based Data Storage Rodney Rodriguez and Xiaoyin Wang, Static Analysis of File Manipulation Scripts Jiahao Zhang, Junjun Zheng, Hiroyuki Okamura and Tadashi Dohi, Moment-Based Approximation for Uncertainty Propagation in Fault Trees Muhammad Alfian Amrizal, Luis Guillen and Takuo Suganuma, An Analytical Approach for Optimizing Data Transfer Rate in a Faulty Wireless Sensor Network
10:00 – 10:30	Break	
10:30 – 12:00	**Session 5A (Dependable Hardware: 2nd floor, Room Le Bois)** Chair: Toshinori Sato Stefan Holst, Shiling Shi and Xiaoqing Wen Targeted Partial-Shift For Mitigating Shift Switching Activity Hot-Spots During Scan Test Yousuke Miyake, Yasuo Sato and Seiji Kajihara On-Chip Delay Measurement for In-Field Test of FPGAs Oskar Pusz, Daniel Kiechle, Christian Dietrich and Daniel Lohmann Program-Structure-Guided Approximation of Large Fault Spaces	**Session 5B (Software II: 1st floor, Room Le Cygne)** Chair: Kenji Kono Xiao-Yi Zhang and Zheng Zheng A Visualization Analytical Framework for Software Fault Localization Metrics Jiantao Zhang, Zheng Zheng, Beibei Yin, Kun Qiu and Yang Liu Testing Graph Searching Based Path Planning Algorithms by Metamorphic Testing Elder Rodrigues Jr. and Leonardo Montecchi Towards a Structured Specification of Coding Conventions
12:00 – 13:00	Lunch (2nd floor, Room Shunju 3)	
13:00 – 14:30	**Session 6A (Security II: 2nd floor, Room Le Bois)** Chair: Dong Song Kim Aliénor Damien, Michael Marcourt, Vincent Nicomette, Eric Alata and Mohamed Kaâniche Implementation of a Host-based Intrusion Detection System for Avionic Applications Pratyush Kr. Deka, Monowar H. Bhuyan, Youki Kadobayashi and Erik Elmroth Adversarial Impact on Anomaly Detection in Cloud Datacenters Szu Chuang Li, Bo Chen Tai and Yennun Huang Evaluating Variational Autoencoder as a Private Data Release Mechanism for Tabular Data	**Session 6B (Distributed System: 1st floor, Room Le Cygne)** Chair: Tatsuhiro Tsuchiya Achour Mostéfaoui, Matthieu Perrin and Michel Raynal A New Insight into Local Coin-Based Randomized Consensus Brahim Hamid, Quentin Rouland, and Jason Jaskolka Distributed Maintenance of a Spanning Tree of k-Connected Graphs Sara Alhajaili and Arshad Jhumka Auditability: An Approach to Ease Debugging of Reliable Distributed Systems
14:30 – 15:00	Break	
15:00 – 16:30	**Session 7A (Machine Learning: 2nd floor, Room Le Bois)** Chair: Mamoru Ohara Koki Kato and Fuyuki Ishikawa Learning-Based Falsification for Model Families of Cyber-Physical Systems Jusop Choi, Dongsoon Shin, Hyoungshick Kim, Jason Seotis and Jin B. Hong AMVG: Adaptive Malware Variant Generation Framework Using Machine Learning Mengmeng Ge, Xiping Fu, Naeem Syed, Zubair Baig, Gideon Teo and Antonio Robles-Kelly Deep Learning-based Intrusion Detection for IoT Networks	**Session 7B (Reliability Modeling: 1st floor, Room Le Cygne)** Chair: Hiroyuki Okamura Shahid Khan, Joost-Pieter Katoen, Matthias Volk and Marc Bouissou Synergizing Reliability Modeling Languages: BDMPs without repairs and DFTs Fumio Machida On the diversity of machine learning models for system reliability
16:30 – 16:45	Closing (2nd floor, Room Le Bois)	