# SERE 2014 Session Schedule

| Monday, June 30, 2014 | | |
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| 08:30~09:00 | Registration | Ballroom Foyer |
| 09:00~09:10 | Opening<br>(Dr. Christian Hansen, President, IEEE Reliability Society) | Bordeaux |
| 09:10~10:10 | Session I: Keynote Speech I<br>(Professor Doug Tygar, UC Berkeley) | Bordeaux |
| 10:10~10:30 | Coffee Break | Ballroom Foyer |
| 10:30~12:00 | Session II-A: Failure and Fault Prediction<br>Session II-B: System Performance and Accuracy Analysis<br>Session II-C: Mobile Security | Grand Salon<br>Blue Room<br>Salon 1 |
| 12:00~13:30 | Lunch Break | Veranda Room |
| 13:30~15:30 | Session III-A: Software Testing I<br>Session III-B: Information Assurance Workshop I<br>Session III-C: Trustworthy Computing Workshop I | Grand Salon<br>Blue Room<br>Salon 1 |
| 15:30~16:00 | Coffee Break | Ballroom Foyer |
| 16:00~18:00 | Session IV-A: Software Testing II<br>Session IV-B: Information Assurance Workshop II<br>Session IV-C: Trustworthy Computing Workshop II | Grand Salon<br>Blue Room<br>Salon 1 |
| 18:30~20:00 | Conference Reception | Veranda Room |

| Tuesday, July 1, 2014 | | |
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| 09:00~10:00 | Session V: Keynote Speech II<br>(Dr. Jeffrey Voas, NIST) | Bordeaux |
| 10:00~10:30 | Coffee Break | Ballroom Foyer |
| 10:30~11:30 | Session VI: Keynote Speech III<br>(Professor Jian Zhang, Chinese Academy of Sciences) | Bordeaux |
| 11:30~13:30 | Lunch Break | Veranda Room |
| 13:30~15:30 | Session VII-A: Formal Specification and Strategy Analysis<br>Session VII-B: HSCD Workshop I<br>Session VII-C: Student Doctoral Program | Grand Salon<br>Blue Room<br>Salon 1 |
| 15:30~16:00 | Coffee Break | Ballroom Foyer |
| 16:00~18:00 | Session VIII-A: System Quality & Network Security<br>Session VIII-B: Fast Abstract<br>Session VIII-C: Trustworthy Computing Workshop III | Grand Salon<br>Blue Room<br>Salon 1 |
| 18:30~20:00 | Conference Banquet & Award Presentation | China Village Seafood Restaurant |

| Wednesday, July 2, 2014 | | |
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| 09:00~10:00 | Session IX: Keynote Speech Ⅳ<br>(Professor Kishor Trivedi, Duke University) | Bordeaux |
| 10:00~10:30 | Coffee Break | Ballroom Foyer |
| 10:30~12:00 | Session X-A: System Security<br>Session X-B: SSCPS Workshop I<br>Session X-C: Trustworthy Computing Workshop IV | Grand Salon<br>Blue Room<br>Salon 1 |
| 12:00~13:30 | Lunch Break | Veranda Room |
| 13:30~15:30 | Session XI-A: SSCPS Workshop II<br>Session XI-B: HSCD Workshop II | Grand Salon<br>Blue Room |

# SERE 2014 Final Program

| Monday, June 30, 2014 | |
|---|---|
| 08:30~09:00 | **Registration** |
| 09:00~09:10 | **Opening**<br>• President, IEEE Reliability Society − Christian Hansen (Eastern Washington University, USA)<br>• Steering Committee (co-Chair) − W. Eric Wong (University of Texas at Dallas, USA)<br>• Program Chair – Wen-Guey Tzeng (National Chiao Tung University, Taiwan) |
| 09:10~10:10 | **Session I: Keynote Speech I**<br><br>*Adversarial Machine Learning*<br>Professor Doug Tygar<br>Department of Computer Science, University of California − Berkeley, USA |
| 10:10~10:30 | **Coffee Break** |
| 10:30~12:00 | **Session II-A: Failure and Fault Prediction**<br>Chair: Wei-Tek Tsai (Arizona State University)<br><br>• *A Diversity Model Based on Failure Distribution and Its Application in Safety Cases*<br>Luping Chen and John May<br>Safety Systems Research Centre, University of Bristol, UK<br><br>• *The Influence of Developer Quality on Software Fault-Proneness Prediction*<br>Yansong Wu, Yibiao Yang, Yangyang Zhao, Hongmin Lu, Yuming Zhou and Baowen Xu<br>State Key Laboratory for Novel Software Technology, Nanjing University, China<br><br>• *A Two-Stage Data Preprocessing Approach for Software Fault Prediction*<br>Jiaqiang Chen[1], Shulong Liu[1], Wangshu Liu[1], Xiang Chen[1,2], Qing Gu[1] and Daoxu Chen[1]<br>[1]State Key Laboratory for Novel Software Technology, Nanjing University, China<br>[2]School of Computer Science and Technology, Nantong University, China |
| 10:30~12:00 | **Session II-B: System Performance and Accuracy Analysis**<br>Chair: Jian Zhang (Chinese Academy of Sciences, China)<br><br>• *High Performance Java Card Operating System*<br>Mohammad Raafat Eletriby, Mohamed Sobh, Ayman M. Bahaa-Eldin and Hossam M.A. Fahmy<br>Computer and Systems Engineering Department, Ain Shams University, Egypt<br><br>• *Providing Hardware Redundancy for Highly Available Services in Virtualized Environments*<br>Azadeh Jahanbanifar[1], Ferhat Khendek[1] and Maria Toeroe[2]<br>[1]Engineering and Computer Science, Concordia University, Canada<br>[2]Ericsson Inc., Canada<br><br>• *Estimating the Accuracy of Dynamic Change-Impact Analysis Using Sensitivity Analysis*<br>Haipeng Cai[1], Raul Santelices[1] and Tianyu Xu[2]<br>[1]University of Notre Dame, USA<br>[2]Fudan University, China |
| 10:30~12:00 | **Session II-C: Mobile Security**<br>Chair: Phu Phung (University of Illinois at Chicago)<br><br>• *AppMark: A Picture-based Watermark for Android Apps*<br>Yingjun Zhang[1] and Kai Chen[2,3]<br>[1]Trusted Computing and Information, Assurance Laboratory, Institute of Software, Chinese Academy of Sciences, China |

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| | [2]State Key Laboratory of Information Security, Institute of Information Engineering, Chinese Academy of Sciences, China<br>[3]College of IST, Penn State University, USA<br><br>• *ADAutomation: An Activity Diagram Based Automated GUI Testing Framework for Smartphone Applications*<br>Ang Li, Zishan Qin, Mingsong Chen and Jing Liu<br>Shanghai Key Lab of Trustworthy Computing, East China Normal University, China<br><br>• *BinClone: Detecting Code Clones in Malware*<br>Mohammad Reza Farhadi[1], Benjamin C.M. Fung[2], Philippe Charland[3] and Mourad Debbabi[1]<br>[1]Information Systems Engineering, Concordia University, Canada<br>[2]School of Information Studies, McGill University, Canada<br>[3]Mission Critical Cyber Security Section, Defence R&D Canada – Valcartier, Quebec, Canada |
| 12:00~13:30 | **Lunch Break** |
| 13:30~15:30 | **Session III-A: Software Testing I**<br>Chair: Katerina Goseva-Popstojanova (West Virginia University)<br><br>• *Security Test Generation by Answer Set Programming*<br>Philipp Zech, Michael Felderer, Basel Katt and Ruth Breu<br>Institute of Computer Science, University of Innsbruck, Austria<br><br>• *Automated Coverage-Driven Test Data Generation Using Dynamic Symbolic Execution*<br>Ting Su[1], Geguang Pu[1], Bin Fang[1], Jifeng He[1], Jun Yan[2], Siyuan Jiang[3] and Jianjun Zhao[4]<br>[1]Shanghai Key Laboratory of Trustworthy Computing, East China Normal University, China<br>[2]State Key Laboratory of Computer Science, Chinese Academy of Sciences, China<br>[3]Department of Computer Science and Engineering, University of Notre Dame, USA<br>[4]School of Software, Shanghai Jiao Tong University, China<br><br>• *Rule-based Test Input Generation From Bytecode*<br>Weifeng Xu[1], Tao Ding[2] and Dianxiang Xu[3]<br>[1]Department of Computer and Information Science, Gannon University, USA<br>[2]Department of Information System, University of Maryland, Baltimore County, USA<br>[3]Department of Computer Science, Boise State University, USA<br><br>• *Automatic Test Data Generation for Unit Testing to Achieve MC/DC Criterion*<br>Tianyong Wu[1,2,4], Jun Yan[1,2,3] and Jian Zhang[3]<br>[1]Technology Center of Software Engineering, Institute of Software, Chinese Academy of Sciences, China<br>[2]State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, China<br>[3]State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences, China<br>[4]University of the Chinese Academy of Sciences, China |
| 13:30~15:30 | **Session III-B: Information Assurance Workshop I**<br>Chair: Wei Dong (National University of Defense Technology)<br><br>• *FRanC: A Ranking Framework for the Prioritization of Software Maintenance*<br>Dhyanesh Chaudhar[1], Mohammad Zulkernine[2] and Komminist Weldemariam[3]<br>[1]Dhyanesh Chaudhari, School of Computing, Queen's University, Canada<br>[2]Mohammad Zulkernine, School of Computing, Queen's University, Canada<br>[3]Komminist Weldemariam, IBM Research Africa, Kenya<br><br>• *A-R Exploit: An Automatic ROP Exploit Based on Long Sequence*<br>Chao Yang[1], Tao Zheng[1,2] and Zhitian Lin[1]<br>[1]Software Institute, Nanjing University, China<br>[2]State Key Laboratory for Novel Software Technology of Nanjing University, China |

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| | • *The Impact of Static and Dynamic Pairs on Pair Programming*<br>Rajendran Swamidurai[1] and David Umphress[2]<br>[1]Department of Mathematics and Computer Science, Alabama State University, USA<br>[2]Department of Computer Science and Software Engineering, Auburn University, USA<br><br>• *Diagnosis-Guided Regression Test Refinement*<br>J. Jenny Li[1], Patricia Morreale[1] and John Palframan[2]<br>[1]Computer Science Department, Kean University, USA<br>[2]Avaya Labs Research, USA |
| 13:30~15:30 | **Session III-C: Trustworthy Computing Workshop I**<br>Chair: Mingsong Chen (East China Normal University)<br><br>• *New Gen2v2-based Mutual Authentication Schemes*<br>HungYu Chien<br>Department of Information Management, National Chi-Nan University, Taiwan<br><br>• *MicroApp: Architecting Web Application for Non-Uniform Trustworthiness in Cloud Computing Environment*<br>Yen-Chun Hsu[1], Yu-Sung Wu[1], Tsung-Han Tsai[1], Yi-Pin Chiu[1], Chih-Hung Lin[2] and Zhi-Wei Chen[2]<br>[1]Department of Computer Science, National Chiao Tung University, Taiwan<br>[2]CyberTrust Technology Institute, Institute for Information Industry, Taiwan<br><br>• *A Survey on Network Layer Attacks and AODV Defense in Mobile Ad-hoc Networks*<br>Amna Saeed[1], Asad Raza[2] and Haider Abbas[3,4]<br>[1]National University of Sciences & Technology, Islamabad, Pakistan<br>[2]Information Technology, Majan University College, Muscat, Oman<br>[3]Centre of Excellence in Information Assurance, King Saud University, Saudi Arabia<br><br>• *Probabilistic Cycle Detection for Schneie's Solitaire Keystream Algorithm*<br>Wiem Tounsi[1], Benjamin Justus[1], Nora Cuppens-Boulahia[1], Frédéric Cuppens[1] and Joaquin Garcia-Alfaro[2]<br>[1]Institut Mines-Telecom, Télécom Bretagne, Cesson Śevigńe, France<br>[2]Institut Mines-Telecom, Télécom SudParis, Evry, France |
| 15:30~16:00 | **Coffee Break** |
| 16:00~18:00 | **Session IV-A: Software Testing II**<br>Chair: Raul Santelices (University of Notre Dame)<br><br>• *TaaS (Testing-as-a-Service) Design for Combinatorial Testing*<br>Wei-Tek Tsai[1], Guanqiu Qi[1], Lian Yu[2] and Jerry Gao[3]<br>[1]School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, USA<br>[2]School of Software and Microelectronics, Peking University, China<br>[3]College of Engineering, San Jose State University, USA<br><br>• *Generating Test Cases for Context-aware Applications Using Bigraph*<br>Lian Yu[1], Wei-Tek Tsai[2],Yanbing Jiang[1] and Jerry Gao[3]<br>[1]School of Software & Microelectronics, Peking University, China<br>[2]School of Computing, Information, and Decision System Engineering, Arizona State University, USA<br>[3]College of Engineering, San Jose State University, USA<br><br>• *SeTGaM: Generalized Technique for Regression Testing Based on UML/OCL Models*<br>Elizabeta Fourneret[1,2], Jérôme Cantenot[2], Fabrice Bouquet[2], Bruno Legeard[2,3] and Julien Botella[3]<br>[1]SnT Centre, University of Luxembourg, Luxembourg<br>[2]FEMTO ST/INRIA Cassis Project, Université de Franche-Comté, France<br>[3]Smartesting R&D Center, TEMIS, Besançon, France |

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| | • *Effective Regression Testing Using Requirements and Risks*<br>Charitha Hettiarachchi[1], Hyunsook Do[1,2] and Byoungju Choi[2]<br>[1]North Dakota State University, USA<br>[2]Ewha Womans University, Korea |
| 16:00~18:00 | **Session IV-B: Information Assurance Workshop II**<br>Chair: Dianxiang Xu (Boise State University)<br><br>• *Evaluating Software Safety Standards: A Systematic Review and Comparison*<br>W. Eric Wong[1], Tej Gidvani[1], Alfonso Lopez[1], Ruizhi Gao[1] and Matthew Horn[2]<br>[1]Department of Computer Science, University of Texas at Dallas, USA<br>[2]Department of Computer Science, Muhlenberg College, USA<br><br>• *Specification and Analysis of Attribute-Based Access Control Policies: An Overview*<br>Dianxiang Xu and Yunpeng Zhang<br>Department of Computer Science, Boise State University, USA<br><br>• *Software Reliability Virtual Testing for Reliability Assessment*<br>Jun Ai[1,2], Hanyu Pei[1] and Liang Yan[3]<br>[1]School of Reliability and System Engineering, Beihang University, China<br>[2]Science & Technology Laboratory on Reliability & Environment Engineering, Beihang University, China<br>[3]Software Development Center, Industrial and Commercial Bank of China, China |
| 16:00~18:00 | **Session IV-C: Trustworthy Computing Workshop II**<br>Chair: Yunwei Dong (Northwestern Polytechnical University)<br><br>• *Seeing Beyond Visibility: A Four Way Fusion of User Authentication for Efficient Usable Security on Mobile Devices*<br>Farzana Rahman[1], Md Osman Gani[2], Golam Mushih Tanimul Ahsan[2] and Sheikh lqbal Ahamed[2]<br>[1]Department of Computer Science, James Madison University, USA<br>[2]Department of Math, Statistics and Computer Science, Marquette University, USA<br><br>• *Classification of Partially Labeled Malicious Web Traffic in the Presence of Concept Drift*<br>Goce Anastasovski[1] and Katerina Goseva-Popstojanova[2]<br>[1]Alarm.com, USA<br>[2]Lane Department of Computer Science and Electrical Engineering, West Virginia University, USA<br><br>• *CRAXDroid: Automatic Android System Testing by Selective Symbolic Execution*<br>Chao-Chun Yeh[1,3], Han-Lin Lu[3], Chun-Yen Chen[3], Kee-Kiat Khor[3] and Shih-Kun Huang[2,3]<br>[1]Computational Intelligence Technology Center, Industrial Technology Research Institute, Taiwan<br>[2]Information Technology Service Center, National Chiao Tung University, Taiwan<br>[3]Department of Computer Science, National Chiao Tung University, Taiwan<br><br>• *Protection Against Code Obfuscation Attacks Based on Control Dependencies in Android Systems*<br>Mariem Graa[1,2], Nora Cuppens-Boulahia[1], Frédéric Cuppens[1] and Ana Cavalli[2]<br>[1]Telecom Bretagne, Cesson Śevigńe, France<br>[2]Telecom SudParis, Evry, France |
| 18:30~20:00 | **Conference Reception** |

| Tuesday, July 1, 2014 | |
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| 09:00~10:00 | **Session V: Keynote Speech II**<br><br>*"Imagineering" an Internet of Anything*<br>Dr. Jeffery Voas<br>National Institute of Standards and Technology, USA |
| 10:00~10:30 | **Coffee Break** |
| 10:30~11:30 | **Session VI: Keynote Speech III**<br><br>*Constraint-Based Reasoning in Static Analysis and Testing*<br>Professor Jian Zhang<br>Institute of Software, Chinese Academy of Sciences, China |
| 11:30~13:30 | **Lunch Break** |
| 13:30~15:30 | **Session VII-A: Formal Specification and Strategy Analysis**<br>Chair: Jianhua Zhao (Nanjing University)<br><br>• *Traceability-Based Formal Specification Inspection*<br>Mo Li[1] and Shaoying Liu[2]<br>[1]Graduate School of Computer and Information Sciences, Hosei University, Japan<br>[2]Faculty of Computer and Information Sciences, Hosei University, Japan<br><br>• *Specification of Dynamic Fault Tree Concepts with Stochastic Petri Nets*<br>Lena Herscheid and Peter Tröger<br>Hasso Plattner Institute, University of Potsdam, Germany<br><br>• *Game-theoretic Strategy Analysis for Data Reliability Management in Cloud Storage Systems*<br>Chung-Yi Lin[1,2] and Wen-Guey Tzeng[1]<br>[1]Department of Computer Science, National Chiao Tung University, Taiwan<br>[2]Information and Communication Security Laboratory, Chungwa Telecom Laboratories, Taiwan |
| 13:30~15:30 | **Session VII-B: HSCD Workshop I**<br>Chair: Donghui Guo (Xiamen University)<br><br>• *Security Analysis of MAC Protocol for Mobile Device Identification Based on PARADIS*<br>Niansheng Liu[1], Huaiyu Dai[2] and Donghui Guo[3]<br>[1]College of Computer Engineering, Jimei University, China<br>[2]Department of Electrical and Computer, Engineering, North Carolina State University, USA<br>[3]School of Information Science & Technology, Xiamen University, China<br><br>• *Compiler Assisted Instruction Relocation for Performance Improvement of Cache Hit Rate and System Reliability*<br>Benbin Chen[1], Lin Li[1,2], Yiyang Li[1], Hongyin Luo[1] and Donghui Guo[1,2]<br>[1]Department of Electronic Engineering, Xiamen University, China<br>[2]IC Design & IT Research Center of Fujian Province, Xiamen University, China<br><br>• *Analysis of System Reliability for Cache Coherence Scheme in Multi-Processor*<br>Sizhao Li[1], Shan Lin[1], Deming Chen[3], W. Eric Wong[4] and Donghui Guo[1,2]<br>[1]Department of Electronic Engineering, Xiamen University, China<br>[2]IC Design & IT Research Center of Fujian Province, Xiamen University, China<br>[3]Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign, USA<br>[4]Department of Computer Science, University of Texas at Dallas, USA<br><br>• *Multiphysics Modeling and Characterization of MicroCVD Chip for Growing Carbon Nanomaterials*<br>Long Zheng[1], Yangbing Wu[1], Dan Zhang[1], Liwei Lin[2] and Donghui Guo[1]<br>[1]Department of Electronic Engineering, Xiamen University, China<br>[2]Berkeley Sensor and Actuator Center, University of California − Berkeley, USA |

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| 13:30~15:30 | **Session VII-C: Student Doctoral Program**<br>Chair: Jun Ai (BeiHang University)<br><br>• *Virtual Machine Migration as a Fault Tolerance Technique for Embedded Real-Time Systems*<br>Stefan Groesbrink<br>University of Paderborn, Germany<br><br>• *Using Software Structure Properties as Predictor of Vulnerability Exploitation*<br>Awad Younis and Yashwant K. Malaiya<br>Computer Science Department, Colorado State University, USA<br><br>• *A Multi-function Error Detection Policy to Enhance Communication Integrity in Critical Embedded Systems*<br>Amira Zammali, Agnan de Bonneval and Yves Crouzet<br>CNRS LAAS and University of Toulouse, France<br><br>• *System Call Anomaly Detection Using Multi-HMMs*<br>Esra Yolacan, Jennifer Dy and David Kaeli<br>Department of Electrical and Computer Engineering, Northeastern University, USA |
| 15:30~16:00 | **Coffee Break** |
| 16:00~18:00 | **Session VIII-A: System Quality & Network Security**<br>Chair: Chii-Ren Tsai (Citigroup, Inc.)<br><br>• *Fast Discovery of VM-Sensitive Divergence Points with Basic Block Comparison*<br>Yen-Ju Liu, Chong-Kuan Chen, Micheal Cheng Yi Cho and Shiuhpyng Shieh<br>Department of Computer Science, National Chiao Tung University, Taiwan<br><br>• *Using Network Tainting to Bound the Scope of Network Ingress Attacks*<br>Peter Mell[1] and Richard Harang[2]<br>[1]National Institute of Standards and Technology, USA<br>[2]U.S. Army Research Laboratory, Adelphi, MD ICF International, Baltimore, Maryland, USA<br><br>• *Automatic Numerical Analysis Based on Infinite-precision Arithmetic*<br>Shuai Wei[1], Enyi Tang[1], Tianyu Liu[1], Norbert Th. Müller[2] and Zhenyu Chen[1]<br>[1]State Key Laboratory of Novel Software Technology, Nanjing University, China<br>[2]Abteilung Informatik, University of Trier, Germany |
| 16:00~18:00 | **Session VIII-B: Fast Abstract**<br>Chair: Chiatso Chao (National Chiao Tung University)<br><br>• *An Accurate Fake Access Point Detection Method Based on Deviation of Beacon Time Interval*<br>Kuo-Fong Kao, Wen-Ching Chen, Jui-Chi Chang and Heng-Te Chu<br>Department of Information Networking Technology, Hsiuping University of Science and Technology, Taiwan<br><br>• *How Accurate Is Dynamic Program Slicing? An Empirical Approach to Compute Accuracy Bounds*<br>Siyuan Jiang[1], Raul Santelices[1], Haipeng Cai[1] and Mark Grechanik[2]<br>[1]University of Notre Dame, USA<br>[2]University of Illinois at Chicago, USA<br><br>• *On Coverage-Based Attack Profiles*<br>Anthony Rivers, Mladen Vouk and Laurie Williams<br>North Carolina State University, USA |

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| 16:00~18:00 | **Session VIII-C: Trustworthy Computing Workshop III**<br>Chair: James Wessel (Software Engineering Institute, Carnegie Mellon University)<br><br>• *A Light-weight Software Environment for Confining Android Malware*<br>Xiaolei Li[1], Guangdong Bai[1], Benjamin Thian[1], Zhenkai Liang[1] and Heng Yin[2]<br>[1]National University of Singapore, Singapore<br>[2]Syracuse University, USA<br><br>• *Analysing Requirements to Detect Latent Security Vulnerabilities*<br>Curtis C.R. Busby-Earle[1], Robert B. France[2] and Indrakshi Ray[2]<br>[1]University of the West Indies at Mona, Jamaica<br>[2]Colorado State University, USA<br><br>• *An Anomaly Detection Module for Firefox OS*<br>Borting Chen, Ming-Wei Shih and Yu-Lun Huang<br>Institute of Electrical and Control Engineering, National Chiao Tung University, Taiwan |
| 18:30~20:00 | **Conference Banquet & Award Presentation** |

| Wednesday, July 2, 2014 | |
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| 09:00~10:00 | **Session IX: Keynote Speech Ⅳ**<br><br>*Software Fault Tolerance*<br>Professor Kishor Trivedi<br>Department of Electrical and Computer Engineering, Duke University, USA |
| 10:00~10:30 | **Coffee Break** |
| 10:30~12:00 | **Session X-A: System Security**<br>Chair: Shih-Kun Huang (National Chiao Tung University)<br><br>• *A Modal Model of Stuxnet Attacks on Cyber-Physical Systems: A Matter of Trust*<br>Gerry Howser and Bruce McMillin<br>Department of Computer Science, Missouri University of Science & Technology, USA<br><br>• *Reliable Repair Mechanisms with Low Connection Cost for Code Based Distributed Storage Systems*<br>Hsiao-Ying Lin[1,2], Li-Ping Tung[1] and Bao-Shuh Lin[1]<br>[1]Intelligent Information and Communications Research Center, National Chiao Tung University, Taiwan<br>[2]CASwell Inc., Taiwan<br><br>• *Collision Analysis of Safety Devices to Prevent Hazards in Safety Critical Systems*<br>Jang-Jin Kwon, Doohwan Kim, Jae-Jin Park and Jang Eui Hong<br>Department of Computer Science, Chungbuk National University, Korea |
| 10:30~12:00 | **Session X-B: SSCPS Workshop I**<br>Chair: Ruizhi Gao (University of Texas at Dallas)<br><br>• *A Hybrid Clock System Related to STeC Language*<br>Yixiang Chen[1,2] and Yuanri Zhang[3,4]<br>[1]MoE Engineering Research Center for Software/Hardware Co-design Technology and Application, East China Normal University, China<br>[2]Shanghai Key Lab for Trustworthy Computing, East China Normal University, China<br>[3]Software Engineering Institute, East China Normal University, China<br>[4]University of Nice Sophia Antipolis, France<br><br>• *Post-condition-directed Invariant Inference for Loops over Data Structures*<br>Juan Zhai[1,2], Hanfei Wang[1] and Jianhua Zhao[1]<br>[1]State Key Laboratory for Novel Software Technology, Department of Computer Science and Technology, Nanjing University, China<br>[2]Software Institute, Nanjing University, China<br><br>• *A Qualitative Safety Analysis Method for AADL Model*<br>Bin Gu, Yunwei Dong and Xiaomin Wei<br>School of Computer Science, Northwestern Polytechnical University, China |
| 10:30~12:00 | **Session X-C: Trustworthy Computing Workshop IV**<br>Chair: Yu-Sung Wu (National Chiao Tung University)<br><br>• *Defending ROP Attacks Using Basic Block Level Randomization*<br>Xun Zhan[1], Tao Zheng[1,2] and Shixiang Gao[1]<br>[1]Software Institute, Nanjing University, China<br>[2]National Key Laboratory for Novel Software Technology, Nanjing University, China |

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| | • *Detecting DoS Attacks on Notification Services*<br>J. Jenny Li[1] and Tony Savor[2]<br>[1]Computer Science Department, Kean University, USA<br>[2]Facebook Inc., USA |
| 12:00~13:30 | **Lunch Break** |
| 13:30~15:30 | **Session XI-A: SSCPS Workshop II**<br>Chair: Yixiang Chen (East China Normal University)<br><br>• *A Load Scheduling Strategy for Electric Vehicles Charging System*<br>Zheng Wang[1], Wu Xiao[1] and Hongbin Zhao[2]<br>[1]School of Computer Science and Technology, Northwestern Polytechnical University, China<br>[2]The Center for Information & Communication, Xi'an Power Supply Bureau, China<br><br>• *A Proof System in Process Algebra for Demand and Supply*<br>Xinghua Yao and Yixiang Chen<br>MoE Engineering Research Center for Software/Hardware Co-design Technology and Application, East China Normal University, China<br><br>• *A Predictive Runtime Verification Framework for Cyber-Physical Systems*<br>Kang Yu, Zhenbang Chen and Wei Dong<br>School of Computer, National University of Defense Technology, China |
| 13:30~15:30 | **Session XI-B: HSCD Workshop II**<br>Chair: Yihao Li (University of Texas at Dallas)<br><br>• *A Parameters Tuning Algorithms in Wireless Networks*<br>Hua-Ching Chen[1], Hsuan-Ming Feng[2], Benbin Chen[1] and Donghui Guo[1]<br>[1]Department of Electronic Engineering, Xiamen University, China<br>[2]Department of Computer Science and Information, National Quemoy University, Taiwan<br><br>• *Robustness and Fragility of a New Local-World Dynamical Network Model*<br>Peizhong Liu[1,2], Minghang Wang[2], Ping Li[3]<br>[1]Information Science and Technology College, Xiamen University, China<br>[2]College of Engineering, Huaqiao University, China<br>[3]Quanzhou No.1 Hospital, Quanzhou, China |