SSIRI 2010 Conference Agenda

Wednesday, June 9, 2010	
8:30 am - 9:00 am	**Registration**
9:00 am - 10:30 am Seminar Room1 Chair: Jin Song Dong	**Opening Session** SSIRI Steering Committee Chairs: Sam Keene & W. Eric Wong SSIRI 2010 General Chair: Jin Song Dong SSIRI 2010 Program Chairs: Jun Sun, Ravi Madipadaga, Dianxiang Xu **Keynote I** *Keynote: Once more, with meaning: A Grand Challenge in Informatics* Professor Jim Davies, University of Oxford, UK
10:30 am - 11:00 am	**Coffee Break**
11:00 am - 12:30 pm Seminar Room 1 Chair: Fevzi Belli	**Session 1A: Safety & Anomaly Detection** *Recent Catastrophic Accidents: Investigating How Software Was Responsible* W. Eric Wong, Vidroha Debroy, Adithya Surampudi, HyeonJeong Kim and Michael F. Siok *Modeling and Verification of Safety Critical Systems: A Case Study on Pacemaker* Luu Anh Tuan, Man Chun Zheng and Quan Thanh Tho *Discovering Anomalies in Semantic Web Rules* Yuzhang Feng, Yang Liu, Yuan-Fang Li and Daqing Zhang
11:00 am - 12:30 pm Seminar Room 3 Chair: Liu Shaoying	**Session 1B: Model Checking & Verification** *Model Checking a Lazy Concurrent List-Based Set Algorithm* Shaojie Zhang and Yang Liu *YAWL2DVE: An Automated Translator for Workflow Verification* Fazle Rabbi, Hao Wang and Wendy MacCaull *Scalable V&V Effort Estimation for Ultra-Large-Scale Systems* Christof J. Budnik, Rajesh Subramanyan and Raj Tanikella
11:00 am - 12:30 pm Seminar Room 3 Chair: Xu Dianxiang	**Session 1C: Security Requirements (Invited Session)** *Aligning Security Requirements and Security Assurance using the Common Criteria* Kenji Taguchi, Nobukazu Yoshioka, Takayuki Tobita and Hiroyuki Kaneko *An Agent-based System to Support Assurance of Security Requirements* Moussa Ouedraogo, Haralambos Mouratidis, Djamel Khadraoui, and Eric Dubois *Model-Based Argument Analysis for Evolving Security Requirements* Thein Than Tun, Yijun Yu, Charles Haley and Bashar Nuseibeh
12:30 pm - 2:00 pm	**Lunch Break**
2:00 pm - 3:00 pm Seminar Room 1 Chair: Eric Wong	**Keynote II** *Defining, Securing, and Standardizing Cloud Computing* Dr. Tim Grance, National Institute of Standards and Technology, USA
3:00 pm - 3:30 pm	**Coffee Break**

3:30 pm - 5:30 pm Seminar Room 1 Chair: Min Xie	**Session 2A: Software Reliability** *Failure Type-Aware Reliability Assessment with Component Failure Dependency* Atef Mohamed and Mohammad Zulkernine *Software Reliability Modeling with Integrated Test Coverage* Jinxia An and Jihong Zhu *Sensitivity of Coverage-Based Software Reliability Models to Variations in the Operational Profile* Odair Silva, Adalberto Crespo, Marcos Chaim and Mario Jino
3:30 pm - 5:30 pm Seminar Room 2 Chair: Kenji Taguchi	**Session 2B: Software Testing I** *A Formal Framework for Mutation Testing* Fevzi Belli and Mutlu Beyazit *An Industrial Case Study on Speeding up User Acceptance Testing by Mining Execution Logs* Zhen Ming Jiang, Alberto Avritzer, Emad Shihab, Ahmed E. Hassan and Parminder Flora *Testing Effort Dependent Software FDP and FCP Models with Consideration of Imperfect Debugging* Rui Peng, Qingpei Hu, Szuhui Ng and Min Xie *A Decompositional Approach to Automatic Test Case Generation Based on Formal Specifications* Shaoying Liu and Shin Nakajima
3:30 pm - 5:30 pm Seminar Room 3 Chair: Thein Than Tun	**Session 2C: Quality Improvement** *Availability Improvement in Virtualized Multiple Servers with Software Rejuvenation and Virtualization* May Tar Hla Myint and Thandar Thein *Traceability Enhancement Technique through the Integration of Software Configuration Management and Personal Working Environment* Dae-Yeob Kim and Cheong Youn *Recoverability of Erasure Codes based and Intensively Written Storage Systems* Xiangyu Luo and Yun Wang *Towards a New Understanding of Advice Interference* Kun Tian, Kendra Cooper, Kang Zhang, Yan Tang and Siyuan Liu
6:00 pm - 8:00 pm	**Conference Reception**
Thursday, June, 10, 2010	
9:00 am - 10:00 am Seminar Room 1 Chair: Jin Song Dong	**Keynote III** *Software Verification via Separation Logic* Professor Wei-Ngan Chin, National University of Singapore
10:00 am - 10:30 am	**Coffee Break**
10:30 am - 12:00 pm Seminar Room 1 Chair: John P. Hayes	**Session 3A: Software Testing II** *Self-Checked Metamorphic Testing of an Image Processing Program* Junhua Ding, Tong Wu, Jun Q. Lu and Xin-hua Hu *PhishTester: Automatic Testing of Phishing Attacks* Hossain Shahriar and Mohammad Zulkernine *Towards Scalable Robustness Testing* Fevzi Belli, Axel Hollmann and W. Eric Wong

10:30 am - 12:00 pm Seminar Room 2 Chair: Jack ZhenMing Jiang	**Session 3B: Modeling & Analysis** *Modeling and Analyzing Timed Security Protocols Using Extended Timed CSP* Xian Zhang, Yang Liu and Mikhail Auguston *Modeling Uncertainties in the Estimation of Software Reliability* *– A Pragmatic Approach* Senthil Kumar Chandran, Aleksandar Dimov and Sasikumar Punnekkat *The 'Best' Valid Safe Protocol Converter* Jing Cao and Albert Nymeyer
12:00 pm - 1:30 pm	**Lunch Break**
1:30 pm - 3:00 pm Seminar Room 1 Chair: Jun Sun	**Section 4A: Workshop on Model-based Verification and Validation I** *Design Patterns for Integrating Variability in Timed Automata* Ralf Mitsching, Carsten Weise and Stefan Kowalewski *Towards Test Case Generation for Synthesizable VHDL Programs Using* *Model Checker* Tolga Ayav, Tugkan Tuglular and Fevzi Belli *Modeling Efficient Multi-chained Stream Signature Protocol using Communicating* *Sequential Processes* Ahmet Koltuksuz, Murat Ozkan and Burcu Kulahcioglu
1:30 pm - 3:00 pm Seminar Room 2 Chair: Liu Yang	**Section 4B: Workshop on Model Checking Secure & Reliable Systems I** *Classification of Static Analysis-based Buffer Overflow Detectors* Hossain Shahriar and Mohammad Zulkernine *Formal Analysis for Stateflow Diagrams* Chunqing Chen *Job-Shop Scheduling Problems using Timed Planning* Xian Zhang
1:30 pm - 3:00 pm Seminar Room 3 Chair: Geguang Pu	**Session 4C: Student Doctoral Program I** *An Automatic Approach to Model Checking UML State Machines* Shao Jie Zhang and Yang Liu *An Automatic Approach To Verify Sensor Network Systems* Manchun Zheng
3:00 pm - 3:30 pm	**Coffee Break**
3:30 pm - 5:30 pm Seminar Room 1 Chair: Junhua Ding	**Section 5A: Workshop on Model-based Verification and Validation II** *Event- and Coverage-Based Testing of Web Services* André T. Endo, Michael Linschulte, Adenilso S. Simão and Simone R. S. Souza *Generalized Partial Test Case Generation Method* Lehilton Lelis Chaves Pedrosa and Arnaldo Vieira Moura *Are Longer Test Sequences Always Better? – A Reliability Theoretical Analysis* Fevzi Belli, Nevin Güler and Michael Linschulte *Utilization of Timed Automata as a Verification Tool for Security Protocols* Ahmet Koltuksuz, Burcu Kulahcioglu and Murat Ozkan
3:30 pm - 5:30 pm Seminar Room 2 Chair: Carsten Weise	**Section 5B: Workshop on Model Checking Secure & Reliable Systems II** *Quantitative Evaluation of Related Web-based Vulnerabilities* Deepak Subramanian, Ha Thanh Le, Peter Kok Keong Loh and Annamalai Benjamin Premkumar *Using Multi Decision Diagram in Model Checking* Truong Khanh Nguyen and Quan Thanh Tho *Analysing System Failure Behaviors With PRISM* Xiaocheng Ge, Richard F. Paige and John A. McDemid *Yet Another Model Checker for PROMELA - the Transformation Approach* Wendi Zhao

3:30 pm - 5:30 pm Seminar Room 3 Chair: Chen Chunqing	**Section 5C: Fast Abstract** *An Efficient Method of Probabilistic Model Checking* Songzheng Song *Constraint Checking for XML-based Language Specification by SAT Solver* Hao Xiao, Zheng Wang and Geguang Pu *Parallel Lexical Analyzer on the Cell Processor* G. Umarani Snikanth *Model Checking C# Code: A Translation Approach* Huiquan Zhu *Structure Assurance Case Methodology for Assessing Software Trustworthiness* Elizabeth Fong, Michael Kass, Thomas Rhodes and Frederick Boland *The Problem of Usable Binary Authentication* Yongzheng Wu and Roland H. C. Yap *Towards Verification of a Service Orchestration Language* Tian Huat Tan
6:00 pm - 10:00 pm	**Conference Banquet**
Friday, June 11, 2010	
9:00 am - 10:00 am Seminar Room 1 Chair: Jin Song Dong	**Keynote IV** *Modeling and Implementing Complex Systems with Timebands* Professor Jim Woodcock, University of York, UK
10:00 am - 10:30 am	**Coffee Break**
10:30 am - 12:00 pm Seminar Room 1 Chair: Tugkan Tuglular	**Session 6A: Workshop on Model Checking Secure & Reliable Systems III** *Modeling and Verification of Transmission Protocols: A Case Study on CSMA/CD Protocol* Ling Shi and Yan Liu *MAFSE: A Model-based Framework for Software Verification* Tho T. Quan, Duc L. N. Hoang, Binh T. Nguyen, An N. Nguyen, Quan D. Tran, Phung H. Nguyen, Thang H. Bui, Anh T. Do, Linh V. Huynh, Nam T. Doan, Nguyen T. Huynh, Thien D. Nguyen, Tam T. Nguyen and Vu H. Nguyen *Modeling and Verifying Security Protocols using PAT Approach* Luu Anh Tuan
10:30 am - 12:00 pm Seminar Room 2 Chair: Peter Loh	**Section 6B: Student Doctoral Program II** *An Approach to Achieving the Reliability in TV Embedded System* Dusica Marijan, Nikola Teslic, Vukota Pekovic and Tarkan Tekcan *Modeling and Analysis of Advanced Automotive ECU Architectures at Early Design Stages using EMF and Model Transformation* Christoph Lauer, Reinhard German and Jens Pollmer
12:00 am - 12:30 pm	**Closing Session & End of SSIRI 2010**