

## DSA 2018 (with co-located CLC 2018) Session Schedule

The 5<sup>th</sup> International Conference on Dependable Systems and Their Applications

The 2018 International Conference on Creative Lifestyle Computing

Saturday, September 22, 2018		
08:00 – 08:45	Registration	
08:45 – 09:00	Opening Ceremony <ul style="list-style-type: none"><li>• Special Guest Guowei Wu (Dalian University of Technology)</li><li>• General Chair: He Jiang (Dalian University of Technology)</li><li>• Program Chair: Kazuhiro Ogata (Japan Advanced Institute of Science and Technology)</li></ul>	
09:00 – 10:00	• Keynote Speech <i>Static Analysis of Programs</i> Jian Zhang Institute of Software, Chinese Academy of Sciences, Beijing, China	
10:00 – 10:30	Coffee Break	
10:30 – 12:10	• Session I-A: Security and Safety • Session I-B: International Symposium on Art-Science-Architecture (1)	
12:10 – 13:30	Lunch Break	
13:30 – 15:35	• Session II-A: Reliability Modeling and Analysis • Session II-B: International Symposium on Art-Science-Architecture (2)	
15:35 – 16:00	Coffee Break	
16:00 – 18:05	• Session III-A: Formal Method • Session III-B: International Symposium on Art-Science-Architecture (3)	
18:30 – 20:00	Conference Banquet	

Sunday, September 23, 2018		
08:00 – 09:00	Registration	
09:00 – 10:40	• Session IV-A: Testing and Debugging • Session IV-B: International Symposium on Creative Computing (1)	
10:40 – 11:00	Coffee Break	
11:00 – 12:15	• Session V-A: Applications • Session V-B: International Symposium on Creative Computing (2)	
12:15 – 13:30	Lunch Break	
13:30 – 15:35	• Session VI-A: International Symposium on Smart Tourism (1) • Session VI-B: International Symposium on Emerging Fashion	
15:35 – 16:00	Coffee Break	
16:00 – 17:40	• Session VII-A: International Symposium on Smart Tourism (2) • Session VII-B: International Symposium on Business Wisdom	
17:40	Adjourn	

## DSA 2018 (with co-located CLC 2018) Presentation Schedule

The 5<sup>th</sup> International Conference on Dependable Systems and Their Applications

The 2018 International Conference on Creative Lifestyle Computing

Saturday, September 22, 2018	
08:00 – 08:45	Registration (Foyer)
08:45 – 09:00	<p>Opening Ceremony Room: No.2 Conference Room</p> <ul style="list-style-type: none"> <li>• Special Guest Guowei Wu (Dalian University of Technology)</li> <li>• General Chair: He Jiang (Dalian University of Technology)</li> <li>• Program Chair: Kazuhiro Ogata (Japan Advanced Institute of Science and Technology)</li> </ul>
09:00 – 10:00	<ul style="list-style-type: none"> <li>• Keynote Speech Chair: He Jiang Room: No.2 Conference Room</li> </ul> <p style="text-align: center;"><i>Static Analysis of Programs</i> Jian Zhang Institute of Software, Chinese Academy of Sciences, Beijing, China</p>
10:00 – 10:30	Coffee Break
10:30 – 12:10	<ul style="list-style-type: none"> <li>• Session I-A: Security and Safety Chair: Kazuhiro Ogata Room: No.1 Conference Room</li> <li>○ <i>Generating Permission-Based Security Policies</i> Xin Li, Hua Vy Le Thanh, Yuxin Deng, and Julian Dolby</li> <li>○ <i>Method-level Permission Analysis Based on Static Call Graph of Android Apps</i> Yan Hu, Weiqiang Kong, Deng Ding, and Jun Yan</li> <li>○ <i>Analysis of Security in Blockchain: Case Study in 51%-Attack Detecting</i> Congcong Ye, Guoqiang Li, Hongming Cai, Yonggen Gu, and Akira Fukuda</li> <li>○ <i>A Multi-Chain Model for CBDC</i> Wei-Tek Tsai, Zihao Zhao, Chi Zhang, Lian Yu, and Enyan Deng</li> </ul>
10:30 – 12:10	<ul style="list-style-type: none"> <li>• Session I-B: International Symposium on Art-Science-Architecture (1) Room: No.2 Conference Room</li> <li>○ <i>The Future of Smart Home</i> Rui Wang</li> <li>○ <i>Key Technique for Operation and Maintenance of an Urban Utility Tunnel System Based on Building Models</i> Rui Han, Daping Liu, Lihua Wang, and Dan Shao</li> <li>○ <i>Research on Regional Spatial Structure of Jilin Province in China During New Urbanization Process</i> Bingxin Li, Xiangun Li, and Liu lei</li> <li>○ <i>Towards a Better Understanding of Constituent Systems for Smart Tourism System of Systems</i> Yingchun Tian, Delin Jing, Changchun Yang, Hui Wang, and Ji Fang</li> </ul>

	<ul style="list-style-type: none"> <li>○ <i>Discovering Building Operational Patterns by Machine Learning: A Way towards A Creative Living Environment</i> Yufeng Deng and Mingzhu Li</li> <li>○ <i>Attempt Study of Applying Creative Computing for the Activation of Intangible Cultural Heritage</i> Meiyu Shi, Lu Zhang, and Hongji Yang</li> </ul>
12:10 – 13:30	Lunch Break
13:30 – 15:35	<p>Session II-A: Reliability Modeling and Analysis Chair: Xin Li Room: No.1 Conference Room</p> <ul style="list-style-type: none"> <li>○ <i>Failure Modes Detection of Nuclear Systems Using Machine Learning</i> David Tian, Jiamei Deng, Enrico Zio, Francesco Maio, and Fucheng Liao</li> <li>○ <i>An Algebraic Binary Decision Diagram for Analysis of Dynamic Fault Tree</i> Wei Jiang, Siwei Zhou, Luyao Ye, Dongdong Zhao, Jing Tian, W. Eric Wong, and Jianwen Xiang</li> <li>○ <i>A GTS-Based Reliability Analysis Method for the Subsea Gas Boosting System</i> Jinyong Yao and Zhiping Pang</li> <li>○ <i>Failure Diagnosis for UAV-Born Inertial Navigation Device Based on BP-Adaboost Model</i> Yingjie Ren and Yanguang Hu</li> </ul>
13:30 – 15:35	<ul style="list-style-type: none"> <li>● Session II-B: International Symposium on Art-Science-Architecture (2) Room: No.2 Conference Room</li> <li>○ <i>Calculation of Transverse Distribution Coefficient of Carbon Fiber Reinforced Steel-Concrete Composite Beams</i> Chunling Zhong, Dong Liang, Yunlong Zhang, Jing Wang, and Yangyang Guo</li> <li>○ <i>Finite Element Solution of Beam Element for Static Response of Composite Beams after Carbon Fiber Reinforcement</i> Yunlong Zhang, Jing Wang, Jie Li, Xiaohui Cong, Jiageng Ren, and Chunling Zhong</li> <li>○ <i>Spatial Analysis of External Prestressed and Bonded Carbon Fiber Reinforced Slab Bridge</i> Jing Wang, Yunlong Zhang, Jie Li and Chunling Zhong</li> <li>○ <i>The Energy Saving Efficiency of Geometric Parameters of Building in A Severely Cold Region</i> Jiaying Teng</li> <li>○ <i>Semi-Virtual Space Design based on New Technologies</i> Yi Wang</li> </ul>
15:35 – 16:00	Coffee Break
16:00 – 18:05	<ul style="list-style-type: none"> <li>● Session III-A: Formal Method Chair: Weiqiang Kong Room: No.1 Conference Room</li> <li>○ <i>Analysis of Some Variants of the Anderson Array-Based Queuing Mutual Exclusion Protocol with Model Checking and Graphical Animations</i> Yati Phyoo and Kazuhiro Ogata</li> <li>○ <i>Model Checking of the Suzuki-Kasami Distributed Mutual Exclusion Algorithm with SPIN</i> Shouki Sakamoto and Kazuhiro Ogata</li> </ul>

	<ul style="list-style-type: none"> <li>○ <i>Verification Model Translation Method toward Behavior Model for CAST</i> Takahiro Ando, Bo Wang, Kenji Hisazumi, Weiqiang Kong, Akira Fukuda, Yasutaka Michiura, Keita Sakemi, and Michihiro Matsumoto</li> </ul>
16:00 – 18:05	<ul style="list-style-type: none"> <li>● Session III-B: International Symposium on Art-Science-Architecture (3) Room: No.2 Conference Room</li> <li>○ <i>Research on Measurement of Transformation and Upgrading Capability of Construction Enterprise Based on Green Development</i> Yuncui Fan, Yuanyuan Li, and Chongshang Yang</li> <li>○ <i>Optimisation Design of Building Integration Photovoltaic System with LOLP Algorithm</i> Chunlei Zhao, Liang Guo, Xu Zhang, and Yaodan Chi</li> <li>○ <i>Research and Design of Photovoltaic System in an Intelligent Photovoltaic Architecture</i> Chao Wang, Lei Lei, Fan Yang, Lu Zhou, and Xu Zhang</li> <li>○ <i>Research and Protection on Water Towers of Chinese Eastern Railway</i> Tong Liu, Daping Liu, and Shijun Wang, and Zi Wang</li> <li>○ <i>Application realization of multi-sensor data fusion algorithm in accurate positioning of personnel in buildings</i> Chenghao Han, Zhongtao Wang, and Longxu Wang</li> </ul>
18:30 – 20:00	Conference Banquet

Sunday, September 23, 2018	
08:00 – 09:00	Registration (Foyer)
09:00 – 10:40	<ul style="list-style-type: none"> <li>• Session IV-A: Testing and Debugging Chair: David Tian Room: No.1 Conference Room</li> <li>○ <i>Nondeterministic Event Sequence Reduction for Android Applications</i> Bo Jiang, Xiaoyan Wang, Huanqiang Xu, Hao Wang, and Chaoyang Zhang</li> <li>○ <i>MCDC-Star: A White-Box Based Automated Test Generation for High MC/DC Coverage</i> Linghuan Hu, W. Eric Wong, D. Richard Kuhn, and Raghu Kacker</li> <li>○ <i>A Theoretical Analysis on the Impacts of Misestimated Test Cases</i> Yanhong Xu, Beibei Yin, Xiaohui Wan, Chenglong Li, and Zheng Zheng</li> <li>○ <i>A Monte Carlo Simulation-Based algorithm for a Repairable system in the GO Methodology</i> Ang Li, Yi Ren, Dezhen Yang, and Zhifeng Li</li> </ul>
09:00 – 10:40	<ul style="list-style-type: none"> <li>• Session IV-B: International Symposium on Creative Computing (1) Room: No.2 Conference Room</li> <li>○ <i>An Approach to Human Computer Interaction Analysis</i> Mingyang Sun and Haiyang Yu</li> <li>○ <i>A New Method of Component Extraction that Helps Creativity</i> Junfeng Zhao and Yingjie Li</li> <li>○ <i>A Synergy between Human Creativity and Computing Technology</i> Lu Zhang and Chi Zhang</li> <li>○ <i>Livelihood Oriented Urban Planning Management through Computing</i> Jiafeng Zhou and Tian Liu</li> <li>○ <i>Ranking Service Products Based on Customer Ratings</i> Pingping Cao, Xiaojie Zhao, and Mingyang Li</li> </ul>
10:40 – 11:00	Coffee Break
11:00 – 12:15	<ul style="list-style-type: none"> <li>• Session V-A: Applications Chair: Zhilei Ren Room: No.1 Conference Room</li> <li>○ <i>Solving Team Making Problem for Crowdsourcing with Evolutionary Strategy</i> Han Wang, Zhilei Ren, Xiaochen Li, and He Jiang</li> <li>○ <i>Comparative Study on Online Review of Different Types of Hotel</i> Tianjiao Niu, Yusi Ding, and Jianzheng Yang</li> <li>○ <i>Indoor Positioning System Based on Zigbee and Inertial System</i> Chenghao Han, Zhongtao Wang, and Longxu Wang</li> <li>○ <i>Interval Estimation of Process Capability Indices Based on the Weibull Distributed Quality Data of Supplier Products</i> Yanhe Cui and Jun Yang</li> <li>○ <i>Process Capability Evaluation of Product Development Based on Information Entropy</i> Lixiang Wang, Wei Dai, and Yubing Huang</li> </ul>
11:00 – 12:15	<ul style="list-style-type: none"> <li>• Session V-B: International Symposium on Creative Computing (2) Room: No.2 Conference Room</li> <li>○ <i>A Creative-Computing based Model for Film Story Construction</i> Hongwei Liu, Hongji Yang, Hongrui Liu, and Enze Yu</li> </ul>

	<ul style="list-style-type: none"> <li>○ <i>A Creative Approach to Transplanting Legacy System to MapReduce Model</i> Junfeng Zhao and Wenmeng Wang</li> <li>○ <i>Mega Medical Data: An Invisible Bridge Links Common Disease and Daily Diet</i> Delin Jing, Yingchun Tian, Changchun Yang, and Shiren Ye</li> <li>○ <i>A Study on World Cultural Heritage Sites Resource Allocation and Supervising System Based on Artificial Intelligence Algorithm and Creative Computing methods - A Case on Hailongtun Tusi Site</i> Meiyu Shi, Wei Ren, and Qinyun Liu</li> <li>○ <i>Research on Educational Data Exchange Based on Big Data Stream Technology</i> Zhen Li, Dongdai Zhou, and Mengqi Li</li> </ul>
12:15 – 13:30	Lunch Break
13:30 – 15:35	<ul style="list-style-type: none"> <li>● Session VI-A: International Symposium on Smart Tourism (1) Room: No.1 Conference Room</li> <li>○ <i>A Research on Polarimetric Visual Simulation based on PG models</i> Junhua Yue and Yan Li</li> <li>○ <i>Protection and Utilisation of Industrial Heritage of Changchun City as Creative Tourism Resource</i> Wei Mo, Meng Zhang, and Jianqiao Zhang</li> <li>○ <i>An Analysis to Sustainability of Heritage Craftsmanship based on Computing-Aided Abstraction Techniques</i> Sicong Ma, Lin Zou, Mark Loon, and Fengbao Ma</li> <li>○ <i>An Approach to Eliciting Data Relations of Internetware</i> Lin Zou, Qinyun Liu, and Sicong Ma, and Qing Duan</li> <li>○ <i>Competition Between Creative Enterprises: Game Model and Numerical Simulation</i> Lingzhu Kong and Weisheng Yu</li> </ul>
13:30 – 15:35	<ul style="list-style-type: none"> <li>● Session VI-B: International Symposium on Emerging Fashion Room: No.2 Conference Room</li> <li>○ <i>Research on Style of Popular Qipao based on A Search Engine</i> Wei Liu, Ran Zhang, and Qingbo Yu</li> <li>○ <i>Innovation Strategies and Future Development Possibilities for Smart Jewelry</i> Yi Song</li> <li>○ <i>Application and Trends of Virtual Bodies in Modern Fashion from the Perspective of Post Human Era</i> Wei Chang</li> <li>○ <i>Technological Influences on Fashion Typography</i> Luran Xiao</li> </ul>
15:35 – 16:00	Coffee Break
16:00 – 17:40	<ul style="list-style-type: none"> <li>● Session VII-A: International Symposium on Smart Tourism (2) Room: No.1 Conference Room</li> <li>○ <i>Cultural Heritage Tourism Site Value Improvement by Using Back Propagation Neural Network Algorithm and Creative Computing Theory</i> Qinyun Liu, Sicong Ma, Wei Ren, and Yuqing Qi</li> <li>○ <i>Big Data and Tourism Statistics</i> Ying Li, Lu Zhang, and Ling Wen</li> </ul>

	<ul style="list-style-type: none"> <li>○ <i>Research Hotspots and Trend Analysis of Wisdom Tourism in China</i> Gongpeng Zhang (Beijing Union University, China), Yuncai Ning (School of Management, China), and Chi Zhang</li> <li>○ <i>Comparison of Quality of Tourism Reviews on Different Chinese Platforms Using LDA</i> Nao Li, Chunjie Zhou, and Chi Zhang</li> </ul>
16:00 – 17:40	<ul style="list-style-type: none"> <li>● Session VII-B: International Symposium on Business Wisdom Room: No.2 Conference Room</li> <li>○ <i>Research on Supply Chain Trustworthy Data Management Based on Blockchain</i> Yuxiang Huang, Zhihong Liang, Bi Huang, and Yongke Sun</li> <li>○ <i>Prefabricated Building Strategy Cost Risk Management</i> Xiaoxin Ding, Kai Liu, and Shujun Shi</li> <li>○ <i>Enterprise Strategy Logic and Strategic Choice in the Context of Big Data: An Empirical Research Based on Baidu Company</i> Hua Zhang, Liang Liu, and Codjo Barthelemy Tossenou</li> <li>○ <i>Handwriting VS Word Processing</i> Hongji Yang and Tian Liu</li> <li>○ <i>Destination Marketing Performance Assessment of Beijing-Tianjin-Hebei Region Based on Online Review Data</i> Heng Wang, Zhicheng Hao, and Yun Li</li> </ul>
17:40	Adjourn