

COCOON 2019

The 25th International Computing and Combinatorics Conference

Xian, China, 29-31th July 2019

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Program

Program for COCOON 2019 Main Conference

Sunday | Monday | Tuesday | Wednesday

July 28, 2019, Sunday

15:00 - 21:00	Registration
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July 29, 2019, Monday

Opening and Invited Talk (Chair: Ding-Zhu Du)	
8:20 - 8:30	Opening
8:30 - 9:30	<i>Huimin Lin</i> Model Checking via Games
9:30 - 10:00	Photo & Coffee Break
Session I (Chair: Shin-Ichi Nakano)	
10:00 - 10:20	<i>Shengjun Xie, Haodi Feng, Haitao Jiang, Junfeng Luan and Daming Zhu</i> An Approximation Algorithm for Sorting by Bounded Singleton Moves

10:20 - 10:40	<i>Cristina Bazgan, Arne Herzel, Stefan Ruzika, Clemens Thielen and Daniel Vanderpooten</i> An FPTAS for a General Class of Parametric Optimization Problems
10:40 - 11:00	<i>Daogao Liu</i> More efficient Algorithms for Stochastic Diameter and Some Unapproximated Problems in Metric Space
11:00 - 11:20	<i>Junjie Chen and Takanori Maehara</i> Chance-Constrained Submodular Knapsack Problem
11:20 - 11:40	<i>Zhenning Zhang, Bin Liu, Yishui Wang, Dachuan Xu and Dongmei Zhang</i> Greedy Algorithm for Maximization of Non-submodular Functions Subject to Knapsack Constraint
11:40 - 12:00	<i>Ruiqi Yang, Dachuan Xu, Donglei Du, Yicheng Xu and Xihong Yan</i> Maximization of Constrained Non-Submodular Functions
12:00 - 14:00	Lunch - Buffet
Session II (Chair: Deshi Ye)	
14:00 - 14:20	<i>Pratyush Dayal and Neeldhara Misra</i> Deleting to Structured Trees
14:20 - 14:40	<i>Hung Le and Baigong Zheng</i> A Simple Local Search Gives a PTAS for the Feedback Vertex Set Problem in Minor-free Graphs
14:40 - 15:00	<i>Ashwin Jacob, Venkatesh Raman and Vibha Sahlot</i> Deconstructing Parameterized Hardness of Fair Vertex Deletion problems
15:00 - 15:20	<i>Kavitha Gopal, Meghana Nasre, Prajakta Nimbhorkar and T. Pradeep Reddy</i> Many-to-one Popular Matchings with Two-sided Preferences and One-sided Ties
15:20 - 15:40	<i>Takehiro Ito, Haruka Mizuta, Naomi Nishimura and Akira Suzuki</i> Incremental Optimization of Independent Sets Under the Reconfiguration Framework
15:40 - 16:00	<i>Jayakrishnan Madathil, Pranabendu Misra and Saket Saurabh</i> An Erdos-Posa Theorem on Neighborhoods and Domination Number
16:00 - 16:20	Coffee Break
Session III (Chair: Van Bang Le)	
16:20 - 16:40	<i>Taiki Todo, Atsushi Iwasaki and Makoto Yokoo</i> Competitive Auctions and Envy-Freeness for Group of Agents
16:40 - 17:00	<i>Deshi Ye, Feng Xie and Guochuan Zhang</i> Truthful Mechanism Design of Reversed Auction on Cloud Computing
17:00 - 17:20	<i>Koji M. Kobayashi</i> An Optimal Algorithm for 2-bounded Delay Buffer Management with Lookahead
17:20 - 17:40	<i>Takashi Horiyama, Shin-Ichi Nakano, Toshiki Saitoh, Koki Suetsugu, Akira Suzuki, Ryuhei Uehara, Takeaki Uno and Kunihiro Wasa</i> Max-Min 3-dispersion Problems
17:40 - 18:00	<i>Hideaki Ohashi, Yasuhito Asano, Toshiyuki Shimizu and Masatoshi Yoshikawa</i> Give and Take: Adaptive Balanced Allocation for Peer Assessments
18:00 - 18:20	<i>Ruidong Yan, Yi Li, Deying Li, Yuqing Zhu, Yongcai Wang and Hongwei Du</i> Activation Probability Maximization for Target Users under Influence Decay Model
18:20 - 20:00	Dinner - Buffet

July 30, 2019, Tuesday

Invited Talk (Chair: Zhenhua Duan)	
8:30 - 9:30	<i>Luke Ong</i> Probabilistic Programming for Bayesian Machine Learning
Session IV (Chair: Gill Barequet)	
9:50 - 10:10	<i>Xiaoming Sun, Yuan Sun, Kewen Wu and Zhiyu Xia</i> On the Relationship between Energy Complexity and other Boolean Function Measures
10:10 - 10:30	<i>Krishnamoorthy Dinesh and Jayalal Sarma</i> Sensitivity, Affine Transforms and Quantum Communication Complexity
10:30 - 10:50	<i>Prasad Chaugule, Nutan Limaye and Aditya Varre</i> Variants of Homomorphism Polynomials Complete for Algebraic Complexity Classes
10:50 - 11:10	<i>Purnata Ghosal and B. V. Raghavendra Rao</i> On Proving Parameterized Size Lower Bounds for Multilinear Algebraic Models
11:10 - 11:30	<i>Dongjing Miao and Zhipeng Cai</i> On The Hardness of Reachability Reduction
11:30 - 11:50	<i>Holger Petersen</i> LIKE Patterns and Complexity
Session V (Chair: R. Inkulu)	
14:00 - 14:20	<i>Grzegorz Guśpiel</i> Smaller Universal Targets for Homomorphisms of Edge-colored Graphs
14:20 - 14:40	<i>Sixue Liu</i> Lower Bounds for Small Ramsey Numbers on Hypergraphs
14:40 - 15:00	<i>Marthe Bonamy, Marc Heinrich, Takehiro Ito, Yusuke Kobayashi, Haruka Mizuta, Moritz Muehlenthaler, Akira Suzuki and Kunihiro Wasa</i> Diameter of Colorings Under Kempe Changes
15:00 - 15:20	<i>Girish Raguvir J, Manas Jyothi Kashyop and N. S. Narayanaswamy</i> Data Structures for Incremental Interval Coloring
15:20 - 15:40	<i>Danil Sagunov and Ivan Bliznets</i> Lower Bounds for the Happy Coloring Problems
15:40 - 16:00	<i>Sun-Yuan Hsieh, Hoang-Oanh Le, Van Bang Le and Sheng-Lung Peng</i> Matching Cut in Graphs with Large Minimum Degree
Session VI (Chair: Sheng-Lung Peng)	
16:20 - 16:40	<i>Gill Barequet and Minati De</i> A Lower Bound on the Growth Constant of Polyaboloes on the Tetrakis Lattice
16:40 - 17:00	<i>Sukanya Bhattacharjee and R. Inkulu</i> Geodesic Fault-tolerant Additive Weighted Spanners
17:00 - 17:20	<i>Pawel Gorecki, Alexey Markin and Oliver Eulenstein</i> Feasibility Algorithms for the Duplication-Loss Cost

17:20 - 17:40	<i>Md. Manzurul Hasan and Md. Saidur Rahman</i> No-Bend Orthogonal Drawings and No-Bend Orthogonally Convex Drawings of Planar Graphs (Extended Abstract)
17:40 - 18:00	<i>Janka Chlebikova and Miroslav Chlebik</i> Approximation Hardness of Travelling Salesman via Weighted Amplifiers
18:00 - 18:20	<i>Mingyu Xiao, Jianan Zhang and Weibo Lin</i> Parameterized Algorithms For The Traveling Purchaser Problem With Additional Constraints
18:30 - 20:30	Banquet

July 31, 2019, Wednesday

Invited Talk (Chair: Cong Tian)	
8:30 - 9:30	<i>Wenfei Fan</i> Making Big Data Small
9:30 - 9:50	Coffee Break
Session VII (Akira Suzuki)	
9:50 - 10:10	<i>Yicheng Xu, Dachuan Xu, Yong Zhang and Juan Zou</i> Universal Facility Location in Generalized Metric Space
10:10 - 10:30	<i>Wei Yu, Zhaohui Liu and Xiaoguang Bao</i> original Distance Constrained Vehicle Routing Problem to Minimize the Total Cost
10:30 - 10:50	<i>Vincent Chau, Minming Li, Yinling Wang, Ruilong Zhang and Yingchao Zhao</i> Minimizing the Cost of Batch Calibration
10:50 - 11:10	<i>Min Li, Yishui Wang, Dachuan Xu and Dongmei Zhang</i> The Seeding Algorithm for Functional k-Means Problem
11:10 - 11:30	<i>Dibyayan Chakraborty, Sandip Das and Joydeep Mukherjee</i> Dominating Set on Overlap Graphs of Rectangles Intersecting a Line
11:30 - 11:50	<i>Mingyu Xiao</i> Upper and Lower Bounds on Approximating Weighted Mixed Domination
12:00 - 14:00	Lunch - Buffet
Session VIII (Chair: Ning Ding)	
14:00 - 14:20	<i>Alessandro Hill, Stefan Voss and Roberto Baldacci</i> Branch-and-Cut Algorithms for Steiner Tree Problems with Privacy Conflicts
14:20 - 14:40	<i>Jan Gorzny and Jonathan Buss</i> Imbalance, Cutwidth, and the Structure of Optimal Orderings
14:40 - 15:00	<i>Niranka Banerjee, Venkatesh Raman and Saket Saurabh</i> Fully Dynamic Arboricity Maintenance
15:00 - 15:20	<i>Hovhannes A. Harutyunyan and Zhiyuan Li</i> A Simple Construction of Broadcast Graphs
15:20 - 15:40	<i>Mehul Kumar, Amit Kumar and C. Pandu Rangan</i> Reoptimization of Path Vertex Cover Problem
15:40 - 16:00	<i>Kai Jin</i> On 1-factorizations of Bipartite Kneser Graphs

16:00 - 16:20	Coffee Break
Session IX (Chair: Yong Zhang)	
16:20 - 16:40	<i>Liang Zhao, Xiaobing Wang, Xinfeng Shu and Nan Zhang</i> A Proof System for a Unified Temporal Logic
16:40 - 17:00	<i>Xinfeng Shu and Nan Zhang</i> An Efficient Decision Procedure for Propositional Projection Temporal Logic
17:00 - 17:20	<i>Jean-Guillaume Dumas, Pascal Lafourcade, Daiki Miyahara, Takaaki Mizuki, Tatsuya Sasaki and Hideaki Sone</i> Interactive Physical Zero-Knowledge Proof for Norinori
17:20 - 17:40	<i>Xiaoming Sun, Yuan Sun, Zhiyu Xia and Jialin Zhang</i> The One-Round Multi-player Voronoi Game on Grids and Trees
17:40 - 18:00	<i>Ning Ding</i> On Exactly Learning Disjunctions and DNFs without Equivalence Queries
18:00 - 18:20	<i>Yang Liu and Kristiaan Pelckmans</i> APTER: Aggregated Prognosis Through Exponential Re-weighting