

The Program of COCOA2014

First Day (December 19, 2014)

Sessions/Time		Titles of Talks / Speakers and Authors
Registration	08:00 - 10:00	
Opening	10:00 - 10:15	
Keynote	10:15 - 11:15	My T. Thai, <i>Heterogenous Interdependent Networks: Critical Elements and Cascades Analysis</i>
Session 1 Classic Combinatorial Optimization	11:15 - 11:30	Sean Yaw and Brendan Mumey, <i>An Exact Algorithm for Non-Preemptive Peak Demand Job Scheduling.</i>
	11:30 - 11:45	Lin Chen, Deshi Ye and Guochuan Zhang, <i>An Asymptotic Competitive Scheme for Online Bin Packing.</i>
	11:45 - 12:00	Christine Markarian, Sebastian Abshoff and Friedhelm Meyer auf der Heide, <i>Randomized Online Algorithms for Set Cover Leasing Problems.</i>
Lunch	12:10 - 13:00	
Session 2 Geometric Optimization	13:00 - 13:15	Binay Bhattacharya, Das Sandip, Tsunehiko Kameda, Priya Ranjan Sinha Mahapatra and Zhao Song, <i>Optimizing Squares Covering a Set of Points.</i>
	13:15 - 13:30	Bogdan Armaselu and Ovidiu Daescu, <i>Algorithms for Fair Partitioning of Convex Polygons.</i>
	13:30 - 13:45	Liang Song, Hejiao Huang and Hongwei Du, <i>A Quasi-Polynomial Time Approximation Scheme for Euclidean CVRPTW.</i>
	13:45 - 14:00	Qi Wei, Xuehou Tan, Bo Jiang and Lijuan Wang, <i>On-line Strategies for Evacuating from a Convex Region in the Plane.</i>
	14:00 - 14:15	Yi-Jun Chang and Hsu-Chun Yen, <i>Rectilinear Duals Using Monotone Staircase Polygons.</i>
	14:15 - 14:30	Azadeh Tabatabaei and Mohammad Ghodsi, <i>Optimal Strategy for Walking in Streets with Minimum Number of Turns for a Simple robot.</i>
	14:30 - 14:45	Mark de Berg, Stephane Durocher and Saeed Mehrabi, <i>Guarding Monotone Art Galleries with Sliding Cameras in Linear Time.</i>
Coffee Break	14:45 - 15:00	
Session 3 Network Optimization	15:00 - 15:15	Marek Chrobak, Kevin Costello, Leszek Gasieniec and Darek Kowalski, <i>Information Gathering in Ad-Hoc Radio Networks with Tree Topology.</i>
	15:15 - 15:30	Binay Bhattacharya and Tsunehiko Kameda, <i>Improved Algorithms for Computing Minmax Regret 1-Sink and 2-Sink on Path Network.</i>
	15:30 - 15:45	Zaobo He, Zhipeng Cai, Siyao Cheng and Xiaoming Wang, <i>Approximate Aggregation for Tracking Quantiles in Wireless Sensor Networks.</i>
	15:45 - 16:00	Hongwei Du, haiming lu, Jing Zhang, Rongrong Zhu and Qiang Ye, <i>Interference-free k-barrier Coverage in Wireless Sensor Networks.</i>
	16:00 - 16:15	Jun Li, Xiaofeng Gao, Guihai Chen, Fengwei Gao and Ling Ding, <i>Performance Analysis and Improvement for the Construction of MCDS Problem in 3D Space.</i>
	16:15 - 16:30	Dimitri Watel and Marc-Antoine Weisser, <i>A Practical Greedy Approximation for the Directed Steiner Tree Problem.</i>
	16:30 - 16:45	Mirela Damian and Dumitru Voicu, <i>Spanning Properties of Theta-Theta Graphs.</i>
	16:45 - 17:00	Hao Gu, Liang Song, Hejiao Huang and Hongwei Du, <i>A Bicriteria Approximation Algorithm for DVRP with Time Windows.</i>

Second Day (December 20, 2014)

Sessions/Chairs/Time		Titles of Talks / Speakers and Authors
Session 4 Optimization in Graphs (I)	08:30 - 08:45	Michael Goodrich and Joseph Simons, <i>Data-Oblivious Graph Algorithms in Outsourced External Memory</i> .
	08:45 - 09:00	Hassan AbouEisha, Shahid Hussain, Vadim Lozin, Jerome Monnot and Bernard Ries, <i>A Dichotomy for Upper Domination in Monogenic Classes</i> .
	09:00 - 09:15	Ernst Althaus, Markus Blumenstock, Alexej Disterhoft, Andreas Hildebrandt and Markus Krupp, <i>Algorithms for the Maximum Weight Connected k-Induced Subgraph Problem</i> .
	09:15 - 09:30	Iyad Kanj, Guohui Lin, Tian Liu, Weitian Tong, Ge Xia, Jinhui Xu, Boting Yang, Fenghui Zhang, Peng Zhang and Binhai Zhu, <i>Algorithms for Cut Problems on Trees</i> .
	09:30 - 09:45	Yusuke Aoki, Bjarni V. Halldorsson, Magnus M. Halldorsson, Takehiro Ito, Christian Konrad and Xiao Zhou, <i>The Minimum Vulnerability Problem on Graphs</i> .
	09:45 - 10:00	Tatsuhiko Hatanaka, Takehiro Ito and Xiao Zhou, <i>The List Coloring Reconfiguration Problem for Bounded Pathwidth Graphs</i> .
Coffee Break	10:00 - 10:15	
Session 5 Optimization in Graphs (II)	10:15 - 10:30	Jianjie Zhou and Liying Kang, <i>Two paths location of a tree with pos/neg weight</i> .
	10:30 - 10:45	Yilin Shen, Xiang Li and My T. Thai, <i>Approximation Algorithms for Optimization Problems in Random Power-Law Graphs</i> .
	10:45 - 11:00	Cong X. Kang and Eunjeong Yi, <i>A Comparison between the Zero Forcing Number and the Strong Metric Dimension of Graphs</i> .
	11:00 - 11:15	Sicen Guo, Minming Li and Yingchao Zhao, <i>Optimal Trees for Minimizing Average Individual Updating Cost</i> .
	11:15 - 11:30	Subhankar Mishra, My Thai, Xiang Li and Jungtaek Seo, <i>Cascading Critical Nodes Detection with Load Redistribution in Complex Systems</i> .
	11:30 - 11:45	Barbara Anthony and Christine Chung, <i>The Power of Rejection in Online Bottleneck Matching</i> .
	11:45 - 12:00	Xueliang Li, Jun Yue and Yan Zhao, <i>The Generalized 3-Edge-Connectivity of Lexicographic Product Graphs</i>
Lunch	12:10 - 13:00	
Session 6 Applied Optimization	13:00 - 13:15	Péter Biró and Iain McBride, <i>Integer Programming Methods for Special College Admissions Problems</i> .
	13:15 - 13:30	Beate Bollig, <i>On the Width of Ordered Binary Decision Diagrams</i> .
	13:30 - 13:45	Jun Kawahara, Koji Kobayashi and Tomotaka Maeda, <i>Tight Analysis of Priority Queuing for Egress Traffic</i> .
	13:45 - 14:00	Yoshihiko Ito, Yuki Kobayashi, Yuya Higashikawa, Naoki Katoh, Sheung-Hung Poon and Maria Saumell, <i>Optimally Bracing Grid Frameworks with Holes</i>
	14:00 - 14:15	Ran Subhashis Majumder, Biswajit Sanyal, Prosenjit Gupta, Soumik Sinha, Shiladitya Pande and Wing-Kai Hon, <i>Top-K Query Retrieval of Combinations with the Sum-of-Subsets</i> .
	14:15 - 14:30	Annalisa De Bonis, <i>Efficient Group Testing Algorithms with a Constrained Number of Positive Responses</i> .
	14:30 - 14:45	Ananya Christman and William Forcier, <i>Maximizing Revenues for On-Line Dial-a-Ride</i> .
Coffee Break	14:45 - 15:00	

Session 7 CSoNet	15:00 - 15:15	Hyunjin Seo, Stuart Thorson, <i>Global Internet Connectedness: 2002-2011.</i>
	15:15 - 15:30	Yongjia Song and Thang Dinh, <i>Optimal Containment of Misinformation in Social Media: A Scenario-based Approach.</i>
	15:30 - 15:45	Golshan Golnari, Zhi-Li Zhang, <i>Multivariate Heavy Tails in Complex Networks.</i>
	15:45 - 16:00	Michael Mayo, Ahmed Abdelzaher and Preetam Ghosh, <i>Mixed Degree-Degree Correlations in Directed Social Networks.</i>
	16:00 - 16:15	Omid Atabati, Babak Farzad, <i>Social and economic network formation: a dynamic model.</i>
	16:15 - 16:30	Mario Ventresca and Dionne Aleman, <i>A Region Growing Algorithm for Detecting Critical Nodes.</i>
	16:30 - 16:45	Mario Ventresca and Dionne Aleman, <i>A Fast Greedy Algorithm for the Critical Node Detection Problem.</i>
	16:45 - 17:00	Neng Fan, Mehdi Golari, <i>Integer Programming Formulations for Minimum Spanning Forests and Connected Components in Sparse Graphs.</i>

Third Day (December 21, 2014)

Sessions/Chairs/Time		Titles of Talks / Speakers and Authors
Session 8 Complexity, Cryptography and Game	08:30 - 08:45	Faisal Abu-Khzam, Judith Egan, Michael Fellows, Frances Rosamond and Peter Shaw, <i>On the Parameterized Complexity of Dynamic Problems with Connectivity Constraints.</i>
	08:45 - 09:00	Iyad Kanj and Stefan Szeider, <i>Parameterized and Subexponential-Time Complexity of Satisfiability Problems and Applications.</i>
	09:00 - 09:15	Bjørn Kjos-Hanssen, <i>Kolmogorov Structure Functions for Automatic Complexity in Computational Statistics.</i>
	09:15 - 09:30	Zhenhua Duan, Jin Liu, Jie Li and Cong Tian, <i>An Improved Even Order Magic Square Construction Algorithm and Its Application.</i>
	09:30 - 09:45	Shaun Fallat, Karen Meagher and Boting Yang, <i>The Complexity of the Positive Semidefinite Zero Forcing.</i>
	09:45 - 10:00	Endre Boros, Khaled Elbassioni, Vladimir Gurvich and Kazuhisa Makino, <i>A Potential Reduction Algorithm for Ergodic Two-person Zero-sum Limiting Average Payoff Stochastic Game.</i>
Coffee Break	10:00 - 10:15	
Session 9 Miscellaneous	10:15 - 10:30	Naoyuki Kamiyama, <i>The Popular Matching and Condensation Problems under Matroid Constraints.</i>
	10:30 - 10:45	Gyan Ranjan, Zhi-Li Zhang and Dan Boley, <i>Incremental Computation of Pseudo-Inverse of Laplacian.</i>
	10:45 - 11:00	David Hay, Shahrzad Shirazipourazad and Arun Sen, <i>Optimal Tracking of Multiple Targets Using UAVs.</i>
	11:00 - 11:15	Xiaosong Li, Zhao Zhang, <i>Approximation Algorithm for the Minimum Connected k-Path Vertex Cover Problem.</i>
Closing	11:15 - 11:30	