

The Program of COCOA2015

First Day (December 18, 2015)

Sessions/Time		Titles of Talks / Speakers and Authors
Registration	07:30 - 09:00	
Keynote	09:00 - 10:00	Eunice Santos, Ph.D., Illinois Institute of Technology
Coffee Break	10:00 - 10:15	
Session 1 Classic Combinatorial Optimization (Chair: Wolfgang Bein)	10:15 - 10:30	Frank Gurski, Jochen Rethmann, Egon Wanke, <i>Directed Pathwidth and Palletizers</i>
	10:30 - 10:45	Yishui Wang, Dachuan Xu, Donglei Du, Chenchen Wu, <i>Local Search Algorithms for k-median and k-Facility Location Problem with Linear Penalties</i>
	10:45 - 11:00	Chao Xu, Jianer Chen, Jianxin Wang, <i>Improved MaxSAT Algorithms for Instances of Degree 3</i>
	11:00 - 11:15	Jing Chen, Xin Han, Wolfgang Bein, Hingfung Ting, <i>Black And White Bin Packing Revisited</i>
	11:15 - 11:30	Yicheng Xu, Dachuan Xu, Donglei Du, Chenchen Wu, <i>A $(5.83 + \epsilon)$-approximation Algorithm for Universal Facility Location with Linear Penalty</i>
	11:30 - 11:45	Hamed Fahimi, Claude-Guy Quimper, <i>Variants of Multi-Resource Scheduling Problems with Equal Processing Times</i>
	11:45 - 12:00	Gopinath Mishra, SUBHRA MAZUMDAR, Arindam Pal, <i>Improved Algorithms for the Evacuation Route Planning Problem</i>
Lunch	12:00 - 13:00	
Session 2 Geometric Optimization (Chair: Alejandro Erickson)	13:00 - 13:15	Xuehou Tan, Qi Wei, <i>An improved on-line strategy for exploring unknown polygons</i>
	13:15 - 13:30	Scott Summers, David Furcy, <i>Optimal self-assembly of finite shapes at temperature 1 in 3D</i>
	13:30 - 13:45	Matias Korman, Sheung-Hung Poon, Marcel Roeloffzen, <i>Line Segment Covering of Cells in Arrangements</i>
	13:45 - 14:00	Yi Xu, Jigen Peng, Yinfeng Xu, Binhai Zhu, <i>The Discrete and Mixed Minimax 2-Center Problem</i>
	14:00 - 14:15	Binay Bhattacharya, Ante Cusic, Akbar Rafiey, Arash Rafiey, Vladyslav Sokol, <i>Approximation Algorithms for Generalized MST and TSP in Grid Clusters</i>
	14:15 - 14:30	Michael Khachay, Helen Zaytseva, <i>Polynomial time approximation scheme for single-depot Euclidean capacitated vehicle routing problem</i>
	14:30 - 14:45	Supantha Pandit, Apurva Mudgal, <i>Covering, Hitting, Piercing, and Packing Rectangles Intersecting an Inclined Line</i>
Coffee Break	14:45 - 15:00	
Session 3 Network Optimization (Chair: Wolfgang Bein)	15:00 - 15:15	Yueshi Wu, Mihaela Cardei, <i>Distributed Algorithm for Mending Barrier Gaps via Sensor Rotation in Wireless Sensor Networks</i>
	15:15 - 15:30	Alejandro Erickson, Abbas Kiasari, Javier Navaridas, Iain Stewart, <i>An efficient shortest-path routing algorithm in the data centre network DPillar</i>
	15:30 - 15:45	Kejia Zhang, Qilong Han, Zhipeng Cai, Guisheng Yin, Junyu Lin, <i>Metric and Distributed On-line Algorithm for Minimizing Routing Interference in Wireless Sensor Networks</i>
	15:45 - 16:00	Yaning Liu, Hongwei Du, Qiang Ye, <i>WDGS: A Weight-Based Distributed Coordinate System</i>

16:00 - 16:15	Gennaro Cordasco, Luisa Gargano, Marco Mecchia, Adele Rescigno, Ugo Vaccaro, <i>A Fast and Effective Heuristic for Discovering Small Target Sets in Social Networks</i>
16:15 - 16:30	Antonio Fernández Anta, Chryssis Georgiou, Elli Zavou, <i>Adaptive Scheduling over a Wireless Channel under Constrained Jamming</i>
16:30 - 16:45	Rongrong Zhu, Hongwei Du, Xiaohua Jia, Chuang Liu, <i>A Sensor Deployment Strategy in Bus-based Hybrid Ad-hoc Networks</i>
16:45 - 17:00	Cristina Bazgan, Janka Chlebkova, Thomas Pontoizeau, <i>New insight into 2-community structures in graphs with applications in social networks</i>

Second Day (December 19, 2015)

Sessions/Chairs/Time		Titles of Talks / Speakers and Authors
Keynote	09:00 - 10:00	My T. Thai, Ph.D., University of Florida
Coffee Break	10:00 - 10:15	
Session 4 Complexity and Game (Chair: Yong Zhang)	10:15 - 10:30	Haiyang wang, zhenhua duan, Cong Tian, <i>Symbolic Model Checking for Alternating Projection Temporal Logic</i>
	10:30 - 10:45	Mathias Weller, Annie Chateau, Rodolphe Giroudeau, <i>On the complexity of scaffolding problems: from cliques to sparse graphs</i>
	10:45 - 11:00	N. R. Aravind, R. B. Sandeep, Naveen Sivadasan, <i>Parameterized lower bound and NP-completeness of some H-free Edge Deletion problems</i>
	11:00 - 11:15	Akaki Mamageishvili, Matus Mihalak, <i>Multicast Network Design Game on a Ring</i>
	11:15 - 11:30	Dongjing Miao, Jianzhong Li, Xianmin Liu, Hong Gao, <i>Vertex Cover in Conflict Graphs: Complexity and A Near Optimal Approximation</i>
	11:30 - 11:45	Andrzej Lingas, <i>Extreme witnesses and their applications</i>
	11:45 - 12:00	Gustavo Dias, Leo Liberti, <i>Orbital independence in symmetric mathematical programs</i>
Lunch	12:00 - 13:00	
Session 5 Optimization in Graphs I (Chair: Ugo Vaccaro)	13:00 - 13:15	Danjun Huang, Ko-Wei Lih, Weifan Wang, <i>Legally $(\Delta+2)$-coloring bipartite</i>
	13:15 - 13:30	Alka Bhushan, Gopalan Sajith, <i>An I/O Efficient Algorithm for Minimum Spanning Trees.</i>
	13:30 - 13:45	Stephan Beyer, Markus Chimani, <i>The Influence of Preprocessing on Steiner Tree Approximations</i>
	13:45 - 14:00	Xueliang Li, Yaoping Mao, Meiqin Wei, Ruihu Li, <i>Searching for (near) optimal codes</i>
	14:00 - 14:15	Wenbin Chen, Lingxi Peng, Jianxiong Wang, Fufang Li, <i>Algorithms for the Densest Subgraph with at least k Vertices and with a Specified Subset</i>
	14:15 - 14:30	Liyang Kang, Erfang Shan, Jianjie Zhou, <i>The connected p-centdian problem on block graphs</i>
	14:30 - 14:45	Wei Ding, Ke Qiu, <i>Approximating the Restricted 1-Center in Graphs</i>
Coffee Break	14:45 - 15:00	
Session 6 Optimization in Graphs II	15:00 - 15:15	Yuichi Asahiro, Yuya Doi, Eiji Miyano, Hirotaka Shimizu, <i>Optimal Approximation Algorithms for Maximum Distance-Bounded Subgraph Problems</i>
	15:15 - 15:30	Abhiruk Lahiri, Joydeep Mukherjee, C. R. Subramanian, <i>Maximum Independent Set on B_1-VPG Graphs</i>
	15:30 - 15:45	Minghui Jiang, <i>Trees, Paths, Stars, Caterpillars and Spiders</i>
	15:45 - 16:00	Bogdan Armasselu, Ovidiu Daescu, <i>Online Minimum Bichromatic Separating Circle</i>

(Chair: Eunjeong Yi)	16:00 - 16:15	Wei Ding, Ke Qiu, <i>Dynamic Single-Source Shortest Paths in Erdős-Rényi Random Graphs</i>
	16:15 - 16:30	Minghui Jiang, Ge Xia, Yong Zhang, <i>Edge-Disjoint Packing of Stars and Cycles</i>
	16:30 - 16:45	Eunjeong Yi, <i>The disjunctive bondage number and the disjunctive total bondage number of graphs</i>
	16:45 - 17:00	Jessica Enright, Kitty Meeks, <i>Deleting edges to restrict the size of an epidemic: a new application for treewidth</i>
	17:00-17:15	Xiang Li, My T. Thai, <i>Adaptive Approximation Algorithms for Community Detection in Dynamic Networks</i>

Third Day (December 20, 2015)

Sessions/Chairs/Time		Titles of Talks / Speakers and Authors
Session 7 Applied Optimization (Chair: Wei Ding)	08:30 - 08:45	Zeqi Song, Hongwei Du, Hejiao Huang, Chuang Liu, <i>Indoor Localization via Candidate Fingerprints and Genetic Algorithm</i>
	08:45 - 09:00	Dan Yang, Xiaohan He, Liang Song, Hejiao Huang, Hongwei Du, <i>A Hybrid Large Neighborhood Search for Dynamic Vehicle Routing Problem with Time Deadline</i>
	09:00 - 09:15	Ahmad Mahmood, Eli Upfal, Evgenios Kornaropoulos, <i>Optimizing Static and Adaptive Probing Schedules for Rapid Event Detection</i>
	09:15 - 09:30	Zola Donovan, Vahan Mkrtchyan, K. Subramani, <i>On clustering without replication in combinatorial circuits</i>
	09:30 - 09:45	Sonia Toubaline, Pierre-Louis Poirion, Claudia D'Ambrosio, Leo Liberti, <i>Observing the state of a smart grid using bilevel programming</i>
	09:45 - 10:00	K. Alex Mills, R. Chandrasekaran, Neeraj Mittal, <i>On Replica Placement in High-Availability Storage under Correlated Failure</i>
Coffee Break	10:00 - 10:15	
Session 8 Miscellaneous (Chair: Michael Khachay)	10:15 - 10:27	Eranda Cela, Vladimir Deineko, Gerhard Woeginger, <i>Another easy QAP case with Robinsonian matrix: Is it easy to recognize?</i>
	10:27 - 10:39	Tadao Takaoka, <i>Algebraic Theory on Shortest Paths for All Flows</i>
	10:39 - 10:51	Yuqing Zhu, Chengxu Sun, Deying Li, Cong Chen, Yinfeng Xu, <i>Searching Graph Communities by Modularity Maximization via Convex Optimization</i>
	10:51 - 11:03	Xin Feng, Yinfeng Xu, Feifeng Zheng, <i>Online scheduling for Electricity Cost in Smart Grid</i>
	11:03 - 11:15	Feifeng Zheng, Longliang Qiao, <i>An online model of berth and quay crane integrated allocation in container terminals</i>
	11:15 - 11:27	Hirimitsu Maji, Taisuke Izumi, <i>Listing Center Strings under the Edit Distance Metric</i>
	11:27 - 11:39	Yasushi Kawase, Xin Han, Kazuhisa Makino, <i>Proportional Cost Buyback Problem with Weight Bounds</i>
	11:39 - 11:51	Kelin Luo, Yinfeng Xu, <i>The Minimum Acceptable Violation Ranking of Alternatives from Voters' Ordinal Rankings</i>
	11:51 - 12:03	Guillaume Escamocher, Barry O'Sullivan, <i>On the Minimal Constraint Satisfaction Problem: Complexity and Generation</i>