藏行顯光
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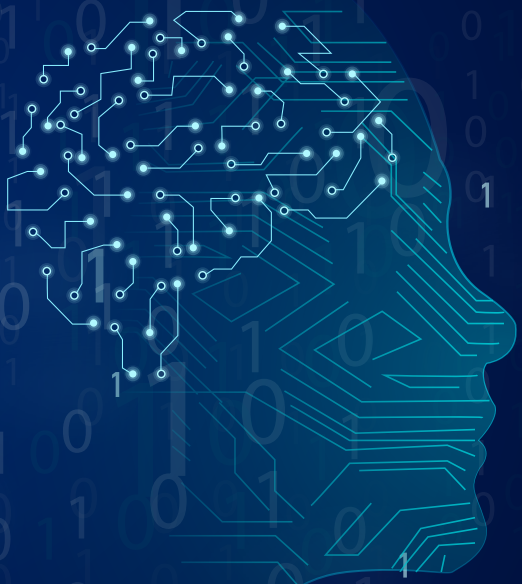
國立成功大學 九十週年
90th Anniversary of NCKU

COCOON 2021

The 27th International Computing and Combinatorics Conference



CONFERENCE PROGRAM

October 24-26, 2021

TAINAN, TAIWAN.

Welcome to COCOON 2021!

The 27th International Computing and Combinatorics Conference (COCOON 2021) will be held in National Cheng Kung University, Tainan, Taiwan during October 24-26, 2021. Original research papers in the areas of algorithms, theory of computation, computational complexity, and combinatorics related to computing are solicited. In addition to theoretical results, we are also interested in submissions that report on experimental and applied research of general algorithmic interest. Special consideration will be given to research that is motivated by real-world problems. Experimental and applied papers are expected to show convincingly the usefulness and efficiency of the algorithms discussed in a practical setting. The venue of the conference will be National Cheng Kung University. Although the conference prefers face-to-face presentations, online presentation is also allowed based on current situation about Covid-19。

All the papers will be published to the symposium in Springer-Verlag's Lecture Notes in Computer Science. Papers of high quality will be invited to special issues of Algorithmica, Theoretical Computer Science (TCS), Journal of Combinatorial Optimization (JOCO), and International Journal of Computer Mathematics: Computer Systems Theory (IJCM:CST), respectively.

The topics of interest include (but are not limited to) the following:

- **Algorithms and Data Structures**
- **Algorithmic Game Theory**
- **Approximation Algorithms and Online Algorithms**
- **Automata, Languages, Logic, and Computability**
- **Complexity Theory**
- **Computational Learning Theory and Knowledge Discovery**
- **Cryptography, Reliability and Security, and Database Theory**
- **Computational Biology and Bioinformatics**
- **Computational Algebra, Geometry, and Number Theory**
- **Graph Drawing and Information Visualization**
- **Graph Theory, Communication Networks, and Optimization**
- **Parallel and Distributed Computing**
- **Fault Tolerant Computing and Fault Diagnosis**

Important Dates:

- Paper Submission Due: June 30, 2021
- Notification of Acceptance: August 15, 2021
- Camera-ready and Registration: August 31, 2021
- Conference Dates: October 24-26, 2021

Preface

The 27th International Computing and Combinatorics Conference (COCOON 2021) was held during October 24–26, 2021. COCOON 2021 provided an excellent venue for researchers working in the area of algorithms, theory of computation, computational complexity, and combinatorics related to computing. The technical program of the conference included 56 regular papers selected by the Program Committee from 131 full submissions received in response to the call for papers. All the papers were peer reviewed by at least three (3.10 on average) Program Committee members or external reviewers. Papers of high quality will be invited to special issues of Algorithmica, Theoretical Computer Science (TCS), the Journal of Combinatorial Optimization (JOCO), and the International Journal of Computer Mathematics: Computer Systems Theory (IJCM:CST), respectively.

The conference also included four invited presentations, delivered by Ding-Zhu Du (University of Texas at Dallas), Takeshi Tokuyama (Kwansei Gakuin University), Ralf Klasing (CNRS and University of Bordeaux), and Tony Q.S. Quek (Singapore University of Technology and Design). Abstracts of their talks are included in this volume. We thank everyone who made this meeting possible: the authors for submitting papers, the Program Committee members, and external reviewers for volunteering their time to review conference papers. We thank Springer for publishing the proceedings in the Lecture Notes in Computer Science series. We would also like to extend special thanks to the other chairs and the conference Organizing Committee for their work in making COCOON 2021 a successful event.

September 2021

Chi-Yeh Chen
Wing-Kai Hon
Ling-Ju Hung
Chia-Wei Lee

Organization

Honorary Chairs

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Huey-Jen Jenny Su	National Cheng Kung University, Taiwan

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C. Pandu Rangan	Indian Institute of Technology, Madras, India
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Hsu-Chun Yen	National Taiwan University, Taiwan
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Publication Chair

Chi-Yeh Chen	National Cheng Kung University, Taiwan

Registration Chair

Yu-Chih Kuo	National Cheng Kung University, Taiwan

Web Chair

Chih-Wei Hsu	National Cheng Kung University, Taiwan

Coupon Allocation in Social Market: Robust and Machine Learning

Ding-Zhu Du

University of Texas at Dallas, USA

Abstract. In this talk, we consider the coupon allocation problem in marketing. It has been reported that 40% of consumers will share an email offer with their friend and 28% of consumers will share deals via social media platforms. What does this mean for a business? Essentially discounts should not just be treated as short term solutions to attract individual customer, instead, allocating coupon to a small fraction of users (called seed users) may trigger a large cascade in a social market. This motivates us to study the influence maximization coupon allocation problem: given a social network and budget, we need to decide to which initial set users should offer the coupon, and how much should the coupon be worth. Our goal is to maximize the number of customers who finally adopt the target product. The talk is based on recent research paper of Jianxiong Guo et al.

Bio. Ding-Zhu Du received his M.S. degree in 1982 from Institute of Applied Mathematics, Chinese Academy of Sciences, and his Ph.D. degree in 1985 from the University of California at Santa Barbara. He worked as a postdoctor at Mathematical Sciences Research Institute, Berkeley in 1985-86, as an assistant professor at MIT in 1986-87, and as a research associate at Princeton University in 1990-91. He was an associate-professor/professor at Department of Computer Science and Engineering, University of Minnesota in 1991-2005, a Program Director for Theory of Computing at National Science Foundation of USA in 2002-2005, and a research professor at Institute of Applied Mathematics, Chinese Academy of Sciences, in 1987-2002. Currently, he is a professor at Department of Computer Science, University of Texas at Dallas. His research interest is in theory of computation, especially in design and analysis of approximation algorithms for combinatorial optimization problems with applications in computer and communication networks, and social networks. He has published more than 230 journal papers and more than 10 books. He is the founder of Journal of Combinatorial Optimization and an co-Editor-in-Chief of Computational Social Network and Discrete Mathematics, Algorithms and Applications. He is also in editorial boards of more than 15 journals.

Discrepancy Theory in Combinatorics, Geometry and Computation

Takeshi Tokuyama

Kwansei Gakuin University, Japan

Abstract. Discrepancy theory investigates uniformity, and appears in several aspects of mathematics and computer science. Consider a range space consisting of a set of n points P in the unit square [0, 1] × [0, 1] (in general, d-dimensional unit cube) and a family R of subregions in the square. For a region R ∈ R with area Area(R), let D(P, R) = |nArea (R) − |P ∩ R||. If P is ideally uniformly distributed, D(P, R) should be small for each R, and we define D(P, {∈ R}) = supR∈RD(P, R). The geometric discrepancy of n points with respect to R is D(n, R) = infP,|P|=nD(P, R), which gives the limit of uniformity of point distribution with respect to R. A classical result is that D(n, R) = logn if R is the set of all axis-parallel rectangular regions. There are some other related discrepancies defined on hypergraphs. In this talk, discrepancy theory and its applications including recent results on consistent digital curved rays will be discussed.

Bio. Takeshi Tokuyama received PhD in mathematics in 1985 from University of Tokyo. He worked as a research staff member of IBM Tokyo Research from 1986 to 1999, and as a professor and a dean of Graduate School of Information Sciences of Tohoku University from 1999 to 2019 and 2015 to 2018, respectively. Currently, he is a professor of Kwansei Gakuin University, Japan. He worked on theory of algorithms including computational geometry, combinatorial optimization and data mining/ analysis, and was the chair of the advisory committee of ISAAC (International Symposium on Algorithms and Computation) from 2008 to 2017. He is a member of Science Council of Japan, and editors of DCG, CGTA, IJCGA, and JoCG.

Learning Graphs with Topology Properties

Tony Q. S. Quek

Singapore University of Technology and Design, Singapore

Abstract. Graphs are mathematical tools, consisting of nodes (vertices) and links (edges), used in various fields to represent, process, visualize, and analyze structured data. In many cases, datasets consist of an unstructured list of samples, and the underly-ing graph topology (representing the structural relations between samples) is unknown. It is thus desirable to learn the graph from data. Typically, graph learning is an ill-posed problem since multiple solutions may exist associating a graph with the data. In this talk, we show how constraints can be imposed directly on the learned graphs so as to enforce certain topology properties that can best fit the data. Specifically, inspired by a specific application domain (e.g., community detection), we develop a graph learning method that learns a graph with overlapping community structure. Our method encompasses and leverages the community structure information, along with attributes such as sparsity and signal smoothness to capture the intrinsic relationships between data entities, such that the estimated graph can optimally fit the data. Furthermore, we extend to more complex datasets with heterogeneous graph signals. In summary, our methods can incorporate topology properties in graph learning, which makes it possible to capture complex and non-typical behavior of graph signals that cannot be explicitly handled just by observed data.

Bio. Tony Q.S. Quek received the B.E. and M.E. degrees in Electrical and Electronics Engineering from Tokyo Institute of Technology, Tokyo, Japan, respectively. At Massachusetts Institute of Technology (MIT), Cambridge, MA, he earned the Ph.D. in Electrical Engineering and Computer Science. Currently, he is the Cheng Tsang Man Chair Professor with Singapore University of Technology and Design and the Visiting Chair Professor with CSIE at NCKU. He also serves as the Head of ISTD Pillar, Sector Lead for SUTD AI Program, and the Deputy Director of SUTD-ZJU IDEA. His current research topics include wireless communications and networking, big data processing, network intelligence, URLLC, and IoT. Dr. Quek received the 2020 IEEE Communications Society Young Author Best Paper Award, the 2020 IEEE Stephen O. Rice Prize, the 2020 Nokia Visiting Professorship, and the 2016-2020 Clarivate Analytics Highly Cited Researcher. He is a Distinguished Lecturer of the IEEE Communications Society and a Fellow of IEEE.

Bamboo Garden Trimming Problem

(Perpetual Maintenance of Machines with Different Urgency Requirements)

Ralf Klasing

CNRS and University of Bordeaux, France

Abstract. A garden G is populated by $n \geq 1$ bamboos $b_1, b_2, ..., b_n$ with the respective daily growth rates $h_1 \geq h_2 \geq \cdots \geq h_n$. It is assumed that the initial heights of bamboos are zero. The robotic gardener maintaining the garden regularly attends bamboos and trims them to height zero according to some schedule. The Bamboo Garden Trimming Problem (BGT) is to design a perpetual schedule of cuts to maintain the elevation of the bamboo garden as low as possible. The bamboo garden is a metaphor for a collection of machines which have to be serviced, with different frequencies, by a robot which can service only one machine at a time. The objective is to design a perpetual schedule of servicing which minimizes the maximum (weighted) waiting time for servicing. We consider two variants of BGT. In discrete BGT the robot trims only one bamboo at the end of each day. In continuous BGT the bamboos can be cut at any time, however, the robot needs time to move from one bamboo to the next. For discrete BGT, we show a simple 4-approximation algorithm and, by exploiting relationship between BGT and the classical Pinwheel Scheduling Problem, we derive a 2-approximation for the general case and a tighter approximation when the growth rates are balanced. For continuous BGT, we propose approximation algorithms which achieve approximation ratios $O(\log(h_1/h_n))$ and $O(\log n)$.

Bio. Ralf Klasing received the PhD degree from the University of Paderborn in 1995. Currently, he is affiliated to the laboratory LaBRI in Bordeaux. His research interests are in "Design and Analysis of Algorithms" and in "Complexity". More particularly, his research focuses on (1) Distributed algorithms, (2) Approximation algorithms for combinatorially hard problems, (3) Algorithmic methods for telecommunication, (4) Communication algorithms in networks. He is Managing Editor of the international journal Journal of Interconnection Networks. He is a member of the Editorial Board of the 10 international journals International Journal of Computer Mathematics: Computer Systems Theory, Journal of Parallel and Distributed Computing, Journal of Computer and System Sciences, Theoretical Computer Science, Discrete Applied Mathematics, Networks, Wireless Networks, Parallel Processing Letters, Fundamenta Informaticae, and Computing and Informatics. He is a member of the Steering Committee of IWOCA. He was a member of the Steering Committee of SIROCCO. He has acted as a member of the Program Committees of 48 wellacknowledged international conferences, including ICALP, STACS, MFCS, FCT, ISAAC, IWOCA, WAOA, OPODIS, SIROCCO and SOFSEM.

COCOON 2021

The 27th International Computing and Combinatorics Conference

Program

2021 / 10 / 25 (Mon.)			
08:30-09:00	Registration		
09:00-09:30	**Opening Ceremony**		
09:30-10:30	**Keynote Speech #1** Prof. Ding-Zhu Du University of Texas at Dallas, USA Session Chair : Prof. Sun-Yuan Hsieh		
10:30-10:45	Coffee Break		
10:45-11:45	**Keynote Speech #2** Prof. Takeshi Tokuyama Kwansei Gakuin University, Japan Session Chair : Prof. Sun-Yuan Hsieh		
11:45-12:55	Lunch		
12:55-13:25	A1-1	B1-1	C1-1
13:25-13:50	A1-2	B1-2	C1-2
13:50-14:15	A1-3	B1-3	C1-3
14:15-14:40	A1-4	B1-4	C1-4
14:40-15:05	A1-5	B1-5	C1-5
15:05-15:15	Coffee Break		
15:15-15:45	A2-1	B2-1	C2-1
15:45-16:10	A2-2	B2-2	C2-2
16:10-16:35	A2-3	B2-3	C2-3
16:35-17:00	A2-4	B2-4	C2-4
17:00-17:25	A2-5	B2-5	C2-5

COCOON 2021

The 27th International Computing and Combinatorics Conference

Program

2021 / 10 / 26 (Tue.)			
09:00-09:30	Registration		
09:30-10:00	A3-1	B3-1	C3-1
10:00-10:25	A3-2	B3-2	C3-2
10:25-10:50	A3-3	B3-3	C3-3
10:50-11:15	A3-4	B3-4	C3-4
11:15-11:40	A3-5		C3-5
11:40-13:00	Lunch		
13:00-14:00	**Keynote Speech #3** Prof. Tony Q.S. Quek Singapore University of Technology and Design, Singapore Session Chair : Prof. Ling-Ju Hung		
14:00-15:00	**Keynote Speech #4** Prof. Ralf Klasing CNRS and University of Bordeaux, France Session Chair : Prof. Ling-Ju Hung		
15:00-15:05	**Best Paper Award ceremony** Session Chair : Prof. Ralf Klasing		
15:05-15:15	Coffee Break		
15:15-15:45	A4-1	B4-1	C4-1
15:45-16:10	A4-2	B4-2	C4-2
16:10-16:35	A4-3	B4-3	C4-3
16:35-17:00	A4-4	B4-4	C4-4
17:00-17:20	**COCOON 2022** Session Chair : Prof. Ling-Ju Hung		

October 25

Session A1: Approximation Algorithms

Time: 12:55∼15:05, October 25
Session Chair: Wing-Kai Hon

A1-1 Sheng-Yen Ko, Ho-Lin Chen, Siu-Wing Cheng, Wing-Kai Hon and Chung-Shou Liao, General Max-Min Fair Allocation.

A1-2 Tom Davot, Lucas Isenmann and Jocelyn Thiebaut, On the approximation hardness of geodetic set and its variants.

A1-3 Liam Roditty and Roei Tov, Approximate Distance Oracles with Improved Stretch for Sparse Graphs.

A1-4 Pooja Goyal and B S Panda, Hardness and Approximation Results of Roman {3}-Domination in Graphs.

A1-5 Richard Spence, Stephen Kobourov and Faryad Sahneh, Approximation algorithms for priority Steiner tree problems.

Session B1: Recreational Games

Time: 12:55∼15:05, October 25
Session Chair: Ho-Lin Chen

B1-1 Suthee Ruangwises, Two Standard Decks of Playing Cards are Sufficient for a ZKP for Sudoku.

B1-2 Win Hlaing Hlaing Myint, Ryuhei Uehara and Giovanni Viglietta,Token Shifting on Graphs.

B1-3 Masaaki Kanzaki, Yota Otachi and Ryuhei Uehara, Computational Complexity of Jumping Block Puzzles.

B1-4 Raimu Isuzugawa, Kodai Toyoda, Yu Sasaki, Daiki Miyahara and Takaaki Mizuki, A Card-minimal Three-Input AND Protocol Using Two Shuffles.

B1-5 Eurinardo Costa, Nicolas Martins and Rudini Sampaio, Spy game: FPT-algorithm and results on graph products.

Session C1: Computational Geometry

Time: 12:55∼15:05, October 25
Session Chair: Meng-Tsung Tsai

C1-1 Stephane Durocher, Mark Keil and Debajyoti Mondal, Bottleneck Convex Subsets: Finding k Large Convex Sets in a Point Set.

C1-2 Shin-Ichi Nakano, The Coverage problem by Aligned Disks

C1-3 Yannick Bosch, Peter Schäfer, Joachim Spoerhase, Sabine Storandt and Johannes Zink, Consistent Simplification of Polyline Tree Bundles.

C1-4 Yuki Kobayashi, Yuya Higashikawa and Naoki Katoh, Improving Upper and Lower Bounds for the Total Number of Edge Crossings of Euclidean Minimum Weight Laman Graphs.

C1-5 Ankush Acharyya, Ramesh Jallu, Vahideh Keikha, Maarten Löffler and Maria Saumell, Minimum Color Spanning Circle in Imprecise Setup.

Session A2: Algorithms

Time: 15:15∼17:25, October 25
Session Chair: Ralf Klasing

A2-1 Edward Pyne and Salil Vadhan, Limitations of the Impagliazzo-Nisan-Wigderson Pseudorandom Generator against Permutation Branching Programs.

A2-2 Dong Xiang and Yunzhou Ju, All-to-All Broadcast in Dragonfly Networks.

A2-3 Chun Lin, Chao-Yuan Huang and Ming-Jer Tsai, An Efficient Algorithm for Enumerating Longest Common Increasing Subsequences.

A2-4 Bugra Caskurlu, Ozgun Ekici and Fatih Erdem Kizilkaya, On Singleton Congestion Games with Resilience Against Collusion

A2-5 Ben Cameron, Aaron Grubb and Joe Sawada, A Pivot Gray Code Listing for the Spanning Trees of the Fan Graph.

Session B2: Online Algorithm and Streaming Algorithms

Time: 15:15∼17:25, October 25
Session Chair: Peter Rossmanith

B2-1 T-H. Hubert Chan and Chui Shan Lee, On the Hardness of Opinion Dynamics Optimization with L_1-Budget on Varying Susceptibility to Persuasion.

B2-2 Vladimir Braverman, Viska Wei and Samson Zhou, Symmetric Norm Estimation and Regression on Sliding Windows.

B2-3 Cheng-Hung Chiang and Meng-Tsung Tsai, Single-Pass Streaming Algorithms to Partition Graphs into Few Forests.

B2-4 Elisabet Burjons, Matthias Gehnen, Henri Lotze, Daniel Mock and Peter Rossmanith, The Secretary Problem with Reservation Costs.

B2-5 Songhua Li, Minming Li, Lingjie Duan and Victor C.S. Lee, Online Ride-Hitching in UAV Travelling.

Session C2: Computational Geometry& Parameterized Complexity and Algorithms

Time: 15:15∼17:25, October 25
Session Chair: Ching-Lueh Chang

C2-1 Ching-Lueh Chang, Deterministic metric 1-median selection with a $1-o(1)$ fraction of points ignored.

C2-2 Guilherme C. M. Gomes, Bruno P. Masquio, Paulo E. D. Pinto, Vinicius F. dos Santos and Jayme L. Szwarcfiter, Disconnected Matchings.

C2-3 Sun-Yuan Hsieh, Van Bang Le and Sheng-Lung Peng, On the d-Claw Vertex Deletion Problem.

C2-4 Ankush Acharyya, Vahideh Keikha, Diptapriyo Majumdar and Supantha Pandit, Constrained Hitting Set Problem with Intervals.

C2-5 Sen Huang, Mingyu Xiao and Xiaoyu Chen, Exact algorithms for maximum weighted independent set on sparse graphs.

October 26

Session A3: Approximation Algorithms& Graph Algorithms

Time: 09:30∼11:40, October 26
Session Chair: Jou-Ming Chang

A3-1 Arindam Biswas and Venkatesh Raman, Sublinear-Space Approximation Algorithms for Max r-SAT.

A3-2 Jingyang Zhao and Mingyu Xiao, A Further Improvement on Approximating TTP-2.

A3-3 Jan Goedgebeur, Shenwei Huang, Yiao Ju and Owen Merkel, Colouring graphs with no induced six-vertex path or diamond.

A3-4 Yu-Han Chen, Kung-Jui Pai, Hsin-Jung Lin and Jou-Ming Chang, Constructing Tri-CISTs in Shuffle-Cubes.

A3-5 Takehiro Ito, Yuni Iwamasa, Yasuaki Kobayashi, Yu Nakahata, Yota Otachi and Kunihiro Wasa, Reconfiguring Directed Trees in a Digraph.

Session B3: Graph Algorithms

Time: 09:30∼11:15, October 26
Session Chair: Sheng-Lung Peng

B3-1 Yusuke Yanagisawa, Yuma Tamura, Akira Suzuki and Xiao Zhou, Decremental Optimization of Vertex-Coloring Under the Reconfiguration Framework.

B3-2 Kung-Jui Pai, Embedding Three Edge-disjoint Hamiltonian Cycles into Locally Twisted Cubes.

B3-3 Luerbio Faria and Uéverton Souza, On the Probe Problem for (r,l)-Well-Coveredness.

B3-4 Nina Klobas and Matjaž Krnc, Distinguishing graphs via cycles.

Session C3: Graph Theory and Applications

Time: 09:30∼11:40, October 26
Session Chair: Chi-Yeh Chen

C3-1 Ruo-Wei Hung and Ming-Jung Chiu, The Restrained Domination and Independent Restrained Domination in Extending Supergrid Graphs.

C3-2 Alan Frieze, Krzysztof Turowski and Wojciech Szpankowski, The Concentration of the Maximum Degree in the Duplication-Divergence Models.

C3-3 Sambhav Gupta, Eddie Cheng and László Lipták, Conditional Fractional Matching Preclusion for Burnt Pancake Graphs and Pancake-Like Graphs.

C3-4 Justie Su-Tzu Juan and Zong-You Lai, The Weakly Dimension-balanced Pancyclicity on Toroidal Mesh Graph Tm,n when Both m and n Are Odd.

C3-5 Maciej Skorski, Hypercontractivity via Tensor Calculus.

Session A4: Fault Tolerant Computing and Fault Diagnosis

Time: 15:15∼17:00, October 26
Session Chair: Chia-Wei Lee

A4-1 Yihong Wang, Shuming Zhou and Zhengqin Yu, Reliability Evaluation of Subsystem Based on Exchanged Hypercube.

A4-2 Jiafei Liu, Shuming Zhou, Qianru Zhou and Zhengqin Yu, Fault diagnosability of regular networks under the Hybrid PMC model.

A4-3 Nai-Wen Chang, Hsuan-Jung Wu and Sun-Yuan Hsieh, A Study for Conditional Diagnosability of Pancake Graphs.

A4-4 Meirun Chen, D. Frank Hsu and Cheng-Kuan Lin, A new measure for locally t-diagnosable under PMC model.

Session B4: Network and Algorithms

Time: 15:15∼17:00, October 26
Session Chair: Ling-Ju Hung

B4-1 Neelima Gupta, Sapna Grover and Rajni Dabas, Respecting Lower Bounds in Uniform Lower and Upper Bounded Facility Location Problem.

B4-2 Wei Ding, Finding Cheapest Deadline Paths.

B4-3 Lu Han, Chenchen Wu and Yicheng Xu, Approximate the Lower-Bounded Connected Facility Location Problem.

B4-4 Longteng Duan, Zifan Gong, Minming Li, Chenhao Wang and Xiaoying Wu, Mechanism Design for Facility Location with Fractional Preferences and Minimum Distance.

Session C4: Automata

Time: 15:15∼17:00, October 26
Session Chair: Tomoyuki Yamakami

C4-1 Tomoyuki Yamakami, Between SC and LOGDCFL: Families of Languages Accepted by Polynomial-Time Logarithmic-Space Deterministic Auxiliary Depth-k Storage Automata.

C4-2 Sammy Khalife, Yann Ponty and Laurent Bulteau, Sequence graphs realizations and ambiguity in language models.

C4-3 Stefan Hoffmann, Ideal Separation and General Theorems for Constrained Synchronization and their Application to Small Constraint Automata.

C4-4 Hyunjoon Cheon, Joonghyuk Hahn, Yo-Sub Han and Sang-Ki Ko, Most Pseudo-copy Languages Are Not Context-free.

COCOON 2021

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Conference Statistics

Wing-Kai Hon, Ling-Ju Hung, and Chia-Wei Lee

COCOON 2021 PC Chairs

Springer

Lecture Notes in Computer Science

LNCS LNAI LNBI

COCOON 2021

The 27th International Computing and Combinatorics Conference

PC Members

41 PC members from 14 countries

Asia

Bangladesh	China	Hong Kong	India
Japan	Singapore	Taiwan	

America

United States			

Europe

Austria	Finland	France	Germany
Greece	United Kingdom		

COCOON 2021

The 27th International Computing and Combinatorics Conference

Submissions

Total 131 submissions from 32 countries

Asia

China	Hong Kong	India	Indonesia
Iran	Israel	Japan	Philippines
Saudi Arabia	Singapore	South Korea	Taiwan
Thailand	Turkey		

America

Brazil	Canada	Chile	United States

Europe

Austria	Belgium	Czechia	Finland
France	Germany	Italy	Netherlands
Norway	Poland	Slovenia	Sweden
Switzerland	United Kingdom		

COCOON 2021

The 27th International Computing and Combinatorics Conference

Reviewing

Each submission has at least 3 reviews

General Statistics

Submissions	131
Reviews	406
External reviewers	144
External reviews	181

Reviewing

reviews for a paper	number of papers
3	118
4	13

COCOON 2021

The 27th International Computing and Combinatorics Conference

Acceptance rate

56 Accepted papers from 21 countries

Acceptance rate

Submissions	131
Accepted	56
Acceptance rate	42.75%

Countries

Austria	Belgium	Brazil	Canada
China	Czechia	France	Germany
Hong Kong	India	Israel	Japan
Netherlands	Poland	Slovenia	South Korea
Taiwan	Thailand	Turkey	United Kingdom
United States			

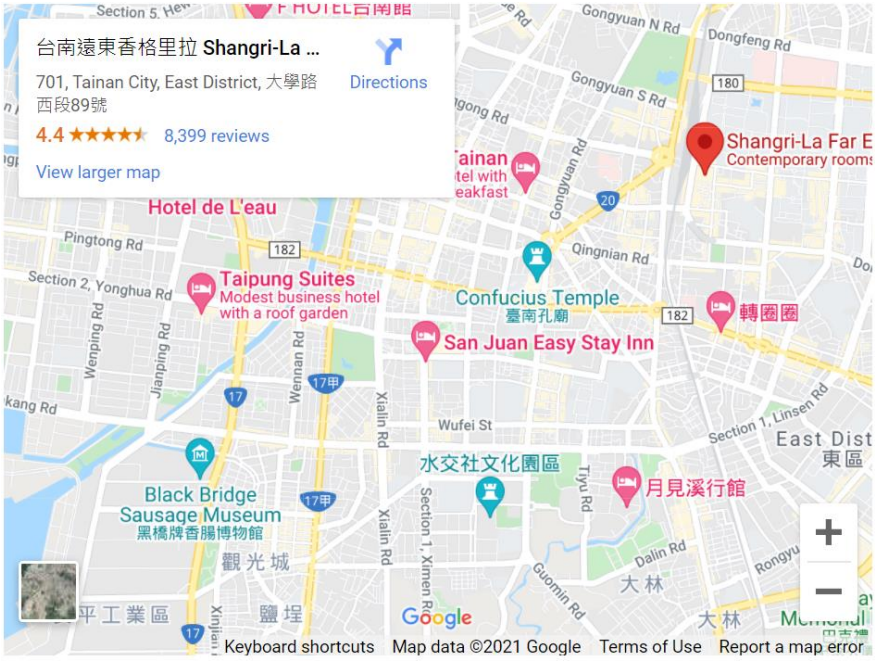
COCOON 2021

The 27th International Computing and Combinatorics Conference

Conference Venue

Shangri-La's Far Eastern Plaza Hotel

No. 89, Sec. W., Dasyue Rd., East Dist., Tainan City 701, Taiwan (R.O.C.)



Transportation Information

By THSR (Taiwan High Speed Rail)

Those who arrived at Tainan Station by Taiwan High Speed Rail can proceed to the interchange corridor on the 2nd floor of High Speed Rail Tainan Station or the No.1 exit on the 1st floor lobby to take the shuttle train at Sharon Station to Tainan Train Station. The shuttle train appears every 30 minutes and arrives at Tainan Train Station in about 20 minutes. You can walk from Tainan Train Station to National Cheng Kung University.

From Kaohsiung International Airport (KHH)

1. Take Kaohsiung MRT from the Airport Station (R4) to Kaohsiung Main Station (R11) for TRA Train or Zuoying HSR Station (R16).
2. There are two options:
    - Take the THSR Train from Zuoying to Tainan Station, and the traveling time is about 15 minutes.
    - Take TRA from Kaohsiung Main Station to Tainan TRA Station, which usually takes about 35 minutes on express trains.

From Taiwan Taoyuan International Airport (TPE)

1. Take a taxi or shuttle bus from the airport to THSR Taoyuan Station, which takes about 20 minutes.
2. Take the THSR train from Taoyuan Station to Tainan Station.

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