Welcome to LOGMS 2019!

This conference runs from August 14-16 at Shaw Foundation Alumni House and Innovation 4.0 Building, National University of Singapore. The goal is to provide a forum for participants from universities and industries to exchange ideas on the latest technology trends, research developments, and practical applications in maritime systems and urban logistics.

We would like to express our gratitude to you in joining us here at LOGMS 2019, and we wish you a fruitful trip in Singapore.

Associate Professor LEE Loo Hay
LOGMS 2019 Programme Chair

Organised by:

NUS National University of Singapore | Centre of Excellence in Modelling and Simulation for Next Generation Ports Faculty of Engineering

NUS National University of Singapore | Centre for Next Generation Logistics Faculty of Engineering

NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE | Maritime Energy & Sustainable Development Centre of Excellence College of Engineering

NUS National University of Singapore | Centre for Maritime Studies

Supported by:

SINGAPORE MARITIME INSTITUTE

Agency for Science, Technology and Research SINGAPORE

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LOGMS 2019 PROGRAMME

<table>
<tr><td colspan="5">(Day 1) 9th International Conference on Logistics and Maritime Systems
14th Aug 2019 (Wed), 08:30-17:10, Shaw Foundation Alumni House (Level 2), 11 Kent Ridge Drive, Singapore 119244</td></tr>
</table>

8:30 - 9:00	Registration

9:00 - 9:20

Opening Ceremony (Auditorium)
Welcome Speech: Prof. Ek Peng Chew (National University of Singapore)
Opening Speech: Guest of Honor, Dr. Sanjay Kuttan (Executive Director , SMI)
Program Introduction: Prof. Xinjia Jiang (LOGMS 2019 Organizing Chair)

9:20 - 10:00

Host: Prof. Zhou Xu (Hong Kong Polytechnic University)
KeyNote 1 - Prof. Rommert Dekker (the Erasmus School of Economics)
Topic: "**Digitization and automation in the port: developments and experiences from the Port of Rotterdam**"

10:00 - 10:40

Host: Prof. Chenhao Zhou (National University of Singapore)
KeyNote 2 - Mr. Kenneth Lim (Chief Technology Officer, Maritime and Port Authority of Singapore)
Topic: "**Maritime Singapore**"

TEA BREAK

11:00 - 12:30

Panel Discussion I: **Future Trends in Maritime and Logistics Systems**
Topic Introduction: Prof. Loo Hay Lee (National University of Singapore)
Chair: Prof. Ek Peng Chew (National University of Singapore)
Prof. Rommert Dekker (the Erasmus School of Economics)
Mr. Kenneth Lim (Chief Technology Officer, MPA)
Mr. Jonathan Lee (Assistant Vice President, PSA Corporation Ltd)
Mr. Desmond Lim (Chief Strategy Officer, Jurong Port)
Mr. Eng Keat Lee (Executive Director, EDB)
Mr. Jens Drewes (President, South Asia Pacific, Kuehne + Nagel)

LUNCH

13:30 - 14:10

Host: Prof. Jasmine Siu Lee Lam (Nanyang Technological University)
KeyNote 3 - Prof. Chelsea White (Georgia Tech)
Topic: "**Current Developments in Logistics and Digitalization**"

14:10 - 15:30

Panel Discussion II: **Steering Towards Industry 4.0**
Chair: Prof. Chelsea White (Georgia Tech)
Mr. Chris Mawer (Chief Technology Officer, Huawei International)
Mr. Zhenwei Zhu (Chief Executive Officer & Co-founder, Enfon Robotics)
Ms. Jingying Lin (Investment Manager, Enfon Robotics)
Mr. Xiaodong Liu (Research Group Lead of Traffic Management and Control, TUMCREATE)
Dr. Sumin Jeon (Consultant at Digital Industry Division, SIEMENS)

TEA BREAK

	S1 (Auditorium)	**S2** (Basil Room)	**S3** (Lemongrass Room)	**S4** (Clove Room)
T1 **15:50 - 17:10**	**Industrial Session:** **.NET Open Source in Maritime and Logistics Systems** (Chair: Muhammad Riza Marhaban)	**Optimization Studies in Port Operations** (Invited Session: Kap Hwan Kim)	**Operations Analytics and Optimization for Smart Logistics in Industries** (Invited Session: Lixin Tang, Defeng Sun)	**Shipping Network - Part 1** (Chair: Michael Bell)

NIGHT OUT (17:10 ONWARDS) @ SATAY By The Bay
Loction: 18 Marina Gardens Dr, #01-19, Singapore 018953 (Between Gardens By The Bay & Marina Barrage)
(Bus will move out from Shaw Foundation Alumni House at 17:25hrs)

	S1 (Lemongrass Room)	**S2** (Thyme Room)	**S3** (Clove Room)	**S4** (Basil Room)
T2 9:00 - 10:20	**New Algorithms for Vehicle Routing Problems in Urban Transportation** (Invited Session: Zhenzhen Zhang, Zhou Xu)	**Optimization for Port and Shipping Operations - Part 1** (Invited Session: Hongtao Hu, Jun Yuan)	**Simulation Modelling, Optimization and Applications - Part 1** (Invited Session: Hui Xiao, Siyang Gao)	**Student Paper Competition** **Judges**: Michael Bell, Chun-Hung Chen, Wai Kin Chan **Host**: Qitong Zhao
	TEA BREAK			
T3 10:40 - 12:00	**New Solution Methods for Optimization Problems in Maritime Applications** (Invited Session: Jun Xia, Zhou Xu)	**Optimization for Port and Shipping Operations - Part 2** (Chair: Chenhao Zhou)	**Simulation Modelling, Optimization and Applications - Part 2** (Chair: Haobin Li)	**Regular Paper Competition** **Judges**: Rommert Dekker, Kap Hwan Kim, David Goldsman **Host**: Weizhi Liu
	LUNCH			
T4 13:30 - 14:50	**New Robust Optimization Models and Methods for Logistics and Supply Chain Management** (Invited Session: Liang Xu, Zhou Xu)	**Optimization for Port and Shipping Operations - Part 3** (Chair: Lu Zhen)	**Logistic & Manufacturing - Part 1** (Chair: Xiangtong Qi, Yifu Li)	**Behavior Studies of Shipping Companies** (Chair: Tae-Woo Lee)
	TEA BREAK			
T5 15:10 - 16:30	**New Trends in Maritime Industry - Part 1** (Invited Session: Jasmine Siu Lee Lam)	**Optimization for Port and Shipping Operations - Part 4** (Chair: Xinjia Jiang)	**Logistic & Manufacturing - Part 2** (Chair: Sebastian Blumentritt)	**Shipping Network - Part 2** (Chair: Camill Harter)

(Day 2) 9th International Conference on Logistics and Maritime Systems
15th Aug 2019 (Thur), 09:00-16:30, Shaw Foundation Alumni House (Level 2), 11 Kent Ridge Drive, Singapore 119244

GALA DINNER (17:00 ONWARDS) @ RAFFLES MARINA (COMPASS Ballroom Level 2)
Location: 10 Tuas West Dr, Singapore 638404
(Bus will move out from Shaw Foundation Alumni House at 16:45hrs)

(Day 3) 9th International Conference on Logistics and Maritime Systems
16th Aug 2019 (Fri), 09:00-13:30, Innovation 4.0 Building (Level 1), 3 Research Link, NUS, Singapore 117602

	S1 (Seminar Room)	**S2** (Conference Room)
T6 9:00 - 10:20	**New Trends in Maritime Industry - Part 2** (Chair: Chrysostomos Stylios)	**Optimization for Port and Shipping Operations - Part 5** (Chair: Yi Tao)
	TEA BREAK	
T7 10:40 - 12:00	**Simulation Modelling, Optimization and Applications - Part 3** (Chair: Wei Zhang)	**Logistic & Manufacturing - Part 3** (Chair: Rong Zhou)
	CLOSING CEREMONY (12:10 - 12:30, Seminar Room)	
	LUNCH	
	INDUSTRIAL VISIT: PORT TOUR (13:30 - 15:30) (Bus will move out from Innovation 4.0 Building at 13:30hrs)	

LOGMS 2019 PARALLEL SESSIONS

T1 , 14 August 2019 (15:50 – 17:10 hrs) **Location: S1** (Auditorium) / **S2** (Basil Room) / **S3** (Lemongrass Room) / **S4** (Clove Room)			
Session	**s/n**	**Paper**	**Authors**
S1	1	Introduction to .NET Open Source Ecosystem	Muhammad Riza Marhaban
Industrial Session: .NET Open Source in Maritime and Logistics Systems (Chair: Muhammad Riza Marhaban)	2	Object-Oriented Modelling and Problem Solving	Chun Lin Goh
	3	Launch of O2DES.NET v3.x	Haobin Li
S2	1	A Simulation Study of Storage Policies in Container Terminal with a Case Study: Busan Port Terminal	Henokh Yernias Fibrianto, Bong-Gown Kang, Soondo Hong, Kap Hwan Kim, Annika Marbach, Hans-Dietrich Haasis, Tobias Buer
Optimization Studies in Port Operations (Invited Session: Kap Hwan Kim)	2	Simultaneous Allocation of Berth and Quay Cranes with Consideration of Vessel Priority	Chulung Lee, Sung Won Cho
	3	Yard Crane Deployment based on Workload Estimation	Annika Marbach, Hans-Dietrich Haasis, Henokh Yernias Fibrianto, Soondo Hong, Tobias Buer
	4	Dispatching Policy for Yard Tractors in a Horizontal Type Container Terminal	Jaekwang Kim, Taekwang Kim, Jeongmin Kim, Hyunsoo Cho, Kwang Ryel Ryu, Jeong Hoon Choi
S3	1	Unidirectional Quay Crane Scheduling Problem with Vessel Stability Consideration	Defeng Sun, Lixin Tang, Roberto Baldacci
Operations Analytics and Optimization for Smart Logistics in Industries (Invited Session: Lixin Tang, Defeng Sun)	2	A Multi-Objective Differential Evolution Algorithm to a Production Planning Problem	Yun Dong, Lixin Tang
	3	Scheduling the Operations of a Double-Load Crane with Time Window in Slab Yard	Guodong Zhao, Lixin Tang
	4	Locomotives Scheduling of Molten Iron Transportation to Minimize the Energy Consumption	Baobin Huang, Lixin Tang, Roberto Baldacci, Defeng Sun
	5	Reinforcement Learning for the Dynamic Vehicle Scheduling in Mining Industry	Fengyuan Shi
S4	1	Analysis of the World Container Shipping Network by Spanning Tree and Gravity Model	Michael Bell, Kam-Fung Cheung, Satoshi Sugiura, Panagiotis Angeloudis, Jing-Jing Pan, Fumitaka Karuchi
Shipping Network - Part 1 (Chair: Michael Bell)	2	Green Urban Freight Distribution Network Design Under Uncertainty	Mengtong Wang, Michael Bell, Lixin Miao, Jun Li
	3	The Impact of Indirect Costs on Routing Decisions in Hinterland Intermodal Network	Elham Jelodari Mamaghani, Yann Bouchery
	4	Solving Winner Determination Problems in Intermodal Transport with Evolutionary Algorithms	Wai Peng Wong, Chen Wei Lee, Loo Hay Lee

T2 , 15 August 2019 (09:00 – 10:20 hrs) **Location: S1** (Lemongrass Room) / **S2** (Thyme Room) / **S3** (Clove Room) / **S4** (Basil Room)			
Session	**s/n**	**Paper**	**Authors**
S1	1	An Exact Method for the Vehicle Routing Problem with Consistency Requirements	Jun Xia, Kai Wang, Lu Zhen, Roberto Baldacci, Shuaian Wang
New Algorithms for Vehicle Routing Problems in Urban Transportation (Invited Session: Zhenzhen Zhang, Zhou Xu)	2	Robust Data-Driven Vehicle Routing with Time Windows	Yu Zhang, Zhenzhen Zhang, Andrew Lim, Melvyn Sim
	3	A Hybrid Algorithm for the Unilateral Transportation Problem (UTP)	Jiliu Li, Hu Qin, Huaxiao Shen, and Zhou Xu
S2	1	Optimization of Loading Clusters for Uncertain Loading Sequence	Hang Yu, Junliang He, Yingen Ge, Caimao Tan
Optimization for Port and Shipping Operations - Part 1 (Invited Session: Hongtao Hu, Jun Yuan)	2	An MIP Method for Multi-Unit Cyclic Schedule Problem of Multi-Cluster tools with Residency Constraints	Zhu Wang, Hongtao Hu
	3	An improved Benders decomposition method for stochastic yard template planning in container terminals	Jiao Mo, Hongtao Hu, Lu Zhen
	4	Fleet size and composition under demand uncertainty for LNG transportation	Lina Zan, Jun Yuan, Xunpeng Shi, Junliang He
S3	1	Efficient Subset Selection for Multi-objective Simulation Optimization Problems	Hui Xiao, Zichun Wang, Loo Hay Lee
Simulation Modelling, Optimization and Applications - Part 1 (Invited Session: Hui Xiao, Siyang Gao)	2	An Object-Oriented Analysis and Design for Industrial Adoption of Simulation Based Optimization Solutions	Haobin Li, Riza Marhaban Muhammad, Weizhi Liu, Xiao Jin
	3	Multifidelity Optimization to Enable Real Time Control of Large Scale Dynamical Systems	Jie Xu, Giulia Pedrielli, Chun Hung Chen, Loo Hay Lee, Jianqiang Hu
	4	A Novel Approximated Optimal Computing Resource Allocation Inspired by Brain Storm Optimization	Yaping Fu, Hui Xiao, Min Huang
S4	1	Space Allocation Problem in Transhipment Container Terminals that Accounts for Container Reshuffling	Wencheng Wang, Chenhao Zhou
Student Paper Competition Judges: Michael Bell, Chun-Hung Chen, Wai Kin Chan Host: Qitong Zhao	2	Dual-Channel Sale Strategy of Shipping Supply Chain Considering the Oversell Behaviour of Liner Company	Heying Sun, Qingcheng Zeng, Jasmine Siu Lee Lam
	3	The Stochastic Container Relocation Problem Under a Flexible Service Policy Considering Truck Waiting Time	Yuanjun Feng, Dongping Song, Dong Li, Qingcheng Zeng

Session	s/n	Paper	Authors
T3 , 15 August 2019 (10:40 – 12:00 hrs) **Location: S1** (Lemongrass Room) / **S2** (Thyme Room) / **S3** (Clove Room) / **S4** (Basil Room)			
S1	1	Emergency Evacuation Routing From the Passenger Ship	Chen Li, Chi To Ng, T.C. Edwin Cheng
New Solution Methods for Optimization Problems in Maritime Applications (Invited Session: Jun Xia, Zhou Xu)	2	The Drone Routing Problem for Regular Monitoring in an Emission Control Area	Silong Zhang, Jun Xia
	3	Robust Ship Fleet Deployment with Shipping Revenue Management	Xiaofan Lai, Fan Wang, Kai Wang
	4	A Simultaneous Column-and-Row Generation Approach to Liner Shipping Network Design	Zhou Xu, Jun Xia, Roberto Baldacci
S2	1	Simulation and Optimization of Container Stacking on the Floating Port	Shuhong Wang, Wei Zhang
Optimization for Port and Shipping Operations - Part 2 (Chair: Chenhao Zhou)	2	Branch and Price Algorithm for the Integrated Berth Allocation and Yard Assignment Problem in Bulk Cargo Port	Jiefu Yang, Jingjing Zhao, Guodong Zhao
	3	Facility Planning and Operation Strategy for Battery-Powered AGV in Automated Container Terminals	Ning Ma, Chenhao Zhou
	4	Reliable Cost-Efficient Flows in Stochastic Time-Varying Networks	Alberto GiuDici, Tao Lu, Clemens Thielen, Rob Zuidwijk
S3	1	An Exploration of Quantum Computing with Q-Sharp for Stochastic Simulation and Optimization	Riza Marhaban Muhammad, Haobin Li, Weizhi Liu
Simulation Modelling, Optimization and Applications - Part 2 (Chair: Haobin Li)	2	Exploiting Digital Twinning Capabilities for Port Resilience Evaluation	Jie Xu, Weiwen Zhou, Elise Miller Hooks, Chun-Hung Chen, Chenhao Zhou, Loo Hay Lee, Ek Peng Chew
	3	Developing Resource-Constrained Queues (RCQ) as a New Paradigm for the Activity-Based Discrete-Event Simulation	Haobin Li, Kundu Kaustav, Vanga Ratnaji, Sathishkumar
	4	Matching Anonymized Individuals with Errors for Service Systems	Wai Kin Chan
S4	1	Effects of Supply Chain Discounts on Optimal Capacity Utilization and Risk on Ro-Ro Shipping	Thalis Zis
Regular Paper Competition Judges: Rommert Dekker, Kap Hwan Kim, David Goldsman Host: Weizhi Liu	2	Logic-Based Benders Decomposition Approach for the Multi-Vehicle Production Routing Problem with Order-Up-to-Level Policy	Zhenzhen Zhang, Zhixing Luo, Roberto Baldacci, Andrew Lim
	3	Rate-Optimal Contextual Ranking and Selection	Siyang Gao, Jianzhong Du, Chun-Hung Chen

Session	s/n	Paper	Authors

T4 , 15 August 2019 (13:30 – 14:50 hrs)
Location: S1 (Lemongrass Room) / **S2** (Thyme Room) / **S3** (Clove Room) / **S4** (Basil Room)

Session	s/n	Paper	Authors
S1	1	Conflict-Robust Optimization Approach to Resource Assignment Problems with Applications in Logistics Management	Jinjia Huang, Fan Wang, Zhou Xu
New Robust Optimization Models and Methods for Logistics and Supply Chain Management (Invited Session: Liang Xu, Zhou Xu)	2	Approximation Methods for Chance Constrained Combinatorial Optimization	Liang Xu, Zhou Xu, Zhuoyu Long
	3	Robust Data-driven Approach for Newsvendor Problem with Non-Parametric Information	Yi Zheng, Liang Xu, Li Jiang
	4	Scheduling Problems in Flexible Systems	Xiangtong Qi
S2	1	Liner Shipping Service Planning Under Sulfur Emission Regulations	Shuaian Wang, Dan Zhuge, Lu Zhen, Chung-Yee Lee
Optimization for Port and Shipping Operations - Part 3 (Chair: Lu Zhen)	2	Liner Shipping Disruption Management in Practice: Generating Recovery Plans for Vessels and Cargo	David Franz Koza, David Pisinger, Grzegorz Siekaniec, Emil Sokoler
	3	Recoverable Robustness Considering Carbon Tax in Weekly Berth and Quay Crane Planning	Qian Sun, Lu Zhen
	4	Oil Export Destination Choice: A Machine Learning Approach	Haiying Jia, Roar Os Adland, Yuchen Wang
S3	1	Research Trends in Warehousing Order Picking Systems	Vedpal Arya, Yuan Wang, Loo Hay Lee
Logistic & Manufacturing - Part 1 (Chair: Xiangtong Qi, Yifu Li)	2	Dynamic Human-Robot Collaborative Picking Strategies	Kaveh Azadeh, Debjit Roy, Rene De Koster
	3	Dynamic Correlated Storage Assignment in Semi-Automated Warehouses	Masoud Mirzaei, Rene de Koster, Nima Zaerpour
	4	Experience-based Territory Planning and Vehicle Dispatching with Variable Demand and Driver Present Condition	Yifu Li, Chenhao Zhou, Wei Zhang, Ning Ma
S4	1	Stabilizing Slot Exchange of Ship Alliance Members Via Bargaining Theory and Non-Cooperative Game Mechanism	Eugene Wong, Allen Tai, Jasmine Siu Lee Lam, Daniel Mo
Behavior Studies of Shipping Companies (Chair: Tae-Woo Lee)	2	Competition Between Liner Shipping Companies	Nemanja Milovanovic, Rommert Dekker
	3	Competition and Collaboration Among Express Delivery Companies	Yanjie Zhou, Kap Hwan Kim
	4	Effects of Mega Container Ships on Supply Chain Performance	Nguyen Kohi Tran

Session	s/n	Paper	Authors
T5 , 15 August 2019 (15:10 – 16:30 hrs) **Location: S1** (Lemongrass Room) / **S2** (Thyme Room) / **S3** (Clove Room) / **S4** (Basil Room)			
S1	1	Analyzing the Effects of Anti-Corruption Measures in the Suez Canal Using AIS Data	Roar Os Adland, Sofie Øiestad
New Trends in Maritime Industry **- Part 1** (Invited Session: Jasmine Siu Lee Lam)	2	Impact Assessment of Regulatory Governance and Regulatory Policies on Port Sustainablity Performance	Manikant Roy, Jasmine Siu Lee Lam
	3	Big Data Analytics in Maritime Logistics: Benefits and Risks for Container Flow Optimization	Nicholas Ruckert, Kathrin Fischer, Thomas Wrona, Pauline Reinecke, Hannah Pache
	4	Perspectives from a Potential NSR User: A Case Study of Taiwan	Po-Hsing Tseng, Jasmine Siu Lee Lam
S2	1	The Real-Time Scheduling Method for AGV Task Assignment and Path Planning in an Automated Container Terminal	Qingcheng Zeng, Zehao Wang
Optimization for Port and Shipping Operations **- Part 4** (Chair: Xinjia Jiang)	2	Hub Ports in Economic Shocks of Melting Arctic	Zhang Ran, Zhuo Sun, Yuan Gao, Zhongxing Tian, Yi Zuo
	3	ALNS for Complete Single Port Storage Planning	Rune Larsen, Dario Pacino
	4	Yard Crane Scheduling in a New Automated Container Terminal Design	Xinjia Jiang
S3	1	Scalable Crowdsourced Delviery Planning with Probalistic Worker Mobility Patterns	Chung-Kyun Han, Shih-Fen Cheng, Hoong Chuin Lau
Logistic & Manufacturing **- Part 2** (Chair: Sebastian Blumentritt)	2	Optimization and Disruption Management in Truck Appointment Problem	Na Li
	3	Logistics Markets in Developing Countries - Strategic Measures to Reduce Economic Risks	Sebastian Blumentritt
	4	Evaluation of Sustainable Supply Chain Performance Using an Integrated Approach	Rui Guo, Yuan Wang, Zhenyong Wu
S4	1	Port Entry Pattern in East Asia: Terminal Involvement and Spatial Impacts on Port Choice	Shengda Zhu, Michael Bell, Xiaowen Fu
Shipping Network **- Part 2** (Chair: Camill Harter)	2	European Hinterland Container Transport as a Multiplex Network – How is Robustness Affected by the Multi-Mode and Multi-Operator Structure?	Camill Harter, Otto Koppius, Rob Zuidwijk
	3	Connectivity Improvement Strategy for the Global Shipping Network by Eigenvector Centrality	Kam-Fung Cheung, Jing-jing Pan, Michael Bell
	4	Optimization of the Indonesian Maritime Logistics Network with Butterfly Route Considerations Based on Mixed Integer Linear Programming	Armand Omar Moeis, Sonny Guo, Akhmad Hidayatno, Teuku Yuri M Zagloel, Komarudin

		T6 , 16 August 2019 (09:00 – 10:20 hrs) **Location: S1** (Seminar Room) / **S2** (Conference Room)	
Session	**s/n**	**Paper**	**Authors**
S1	1	The Impact of E-Collaboration on Different Supply Chain Parties: A Value-Based Management Perspective	Xiunian Zhang, Jasmine Siu Lee Lam
New Trends in Maritime Industry **- Part 2** (Chair: Chrysostomos Stylios)	2	Vessel Trajectory Prediction Using AIS Historical Data	Rezaei Somarin Aghil, Xuereb Maxime, Szu Hui Ng
	3	Blockchain Applications in the Maritime Industry	Shuyi Pu, Jasmine Siu Lee Lam
	4	Maritime IoT Platform	Serena Albertario, Jacopo Cassina, Petros Karvelis, Chrysostomos Stylios
S2	1	Selecting Algorithms for the Efficient Solving of Large Berth Allocation Problems	Eric Sanlaville, Jakub Wawrzyniak, Maciej Drozdowski
Optimization for Port and Shipping Operations **- Part 5** (Chair: Yi Tao)	2	The container fleet sizing and management problem by using combinable containers	Koichi Shintani, Rob Konings, Akio Imai
	3	A Vehicle Routing Problem Considering Order Priority in O2O E-Commerce	Tian Tian
	4	A multi-depot vehicle routing problem with order split and allocation in e-commerce logistics	Yi Tao, Changhui Lin, Lijun Wei

		T7 , 16 August 2019 (10:40 – 12:00 hrs) **Location: S1** (Seminar Room) / **S2** (Conference Room)	
Session	**s/n**	**Paper**	**Authors**
S1	1	Digital Twins to Improve Efficiency by Forecasting Upcoming Bottle-Necks	Holger Schuett
Simulation Modelling, Optimization and Applications **- Part 3** (Chair: Wei Zhang)	2	Optimal Computing Budget Allocation for Binary Classification with Noisy Labels and its Applications on Simulation Analytics	Weizhi Liu
	3	Coordinated Signal Control on Urban Intersection Group: A Simulation-based Optimization Approach	Jie Yang, Xin Qi, Lu Hu, Bin Zhao, Juanxiu Zhu, Yangsheng Jiang
S2	1	International Logistics Connectivity for Chinese Inland Regions in the Belt and Road by Dry Ports	Hairui Wei
Logistic & Manufacturing **- Part 3** (Chair: Rong Zhou)	2	Scenario-Based Analysis for Energy Transition and LNG Shipping: A Case Study of China	Yuwei Yin, Jasmine Siu Lee Lam
	3	Coordinated Optimization of the Berth and Headway of Bus Line Stations with Consideration the Influence of Congestion Propagation	Bin Zhao, Beichuan Wu, Lu Hu, Jie Yang, Juanxiu Zhu, Yangsheng Jiang
	4	Quantify Supply Chain Vulnerability	Rong Zhou

LOGMS Directions to Conference Venues

Day 1 & 2. *Shaw Foundation Alumni House*

Option 1: Taking public transport (refer to map on next page)

- Take MRT (Circle Line) to the Kent Ridge Station (CC24)
- Take **Exit A** and turn right to the bus stop ❸
- Take the free NUS shuttle bus service A1
- Alight at the bus-stop AS 5 ❶
- Continue walking forward and SFAH is on your left

Option 2: Take taxi → Just need to provide driver with postal code **119244**.

Option 3: Driving

(from Ayer Rajah Expressway , AYE)

- From the city, take Ayer Rajah Expressway (AYE) west-bound, exiting left into Clementi Road
- Continue down Clementi Road for around 1 km until Kent Ridge Crescent (2nd Entrance)
- Turn left into (2nd Entrance) Kent Ridge Crescent. Keep right
- Make an immediate right turn into Kent Ridge Drive
- Continue down the road for a short distance.
- Shaw Foundation Alumni House is on the left.
- Please park at car park 15.

(from Pasir Panjang Road)

- From Pasir Panjang road, turn left into Heng Mui Keng Terrace.
- Turn left into Kent Ridge Drive.
- Continue down Kent Ridge Drive for a short distance.
- Shaw Foundation Alumni House is on the right.
- Please park at car park 15.

Address: Shaw Foundation Alumni House, 11 Kent Ridge Drive Singapore **119244**

Note: For directions to SFAH, you can call **+65 65165775** to find out more.

Day 3. *Innovation 4.0 Building*

Option 1: Taking public transport (refer to map on next page)

- Take MRT (Circle Line) to the Kent Ridge Station (CC24)
- Take **Exit A**, turn right and walk through the underground tunnel to the bus stop ❹
- Take the free NUS shuttle bus service D2
- Alight at the bus-stop TCOMS ❺
- Cross the road and walk down the slope - the Innovation 4.0 is the building on your right

Option 2: Take taxi → Just need to provide driver with postal code 117602.

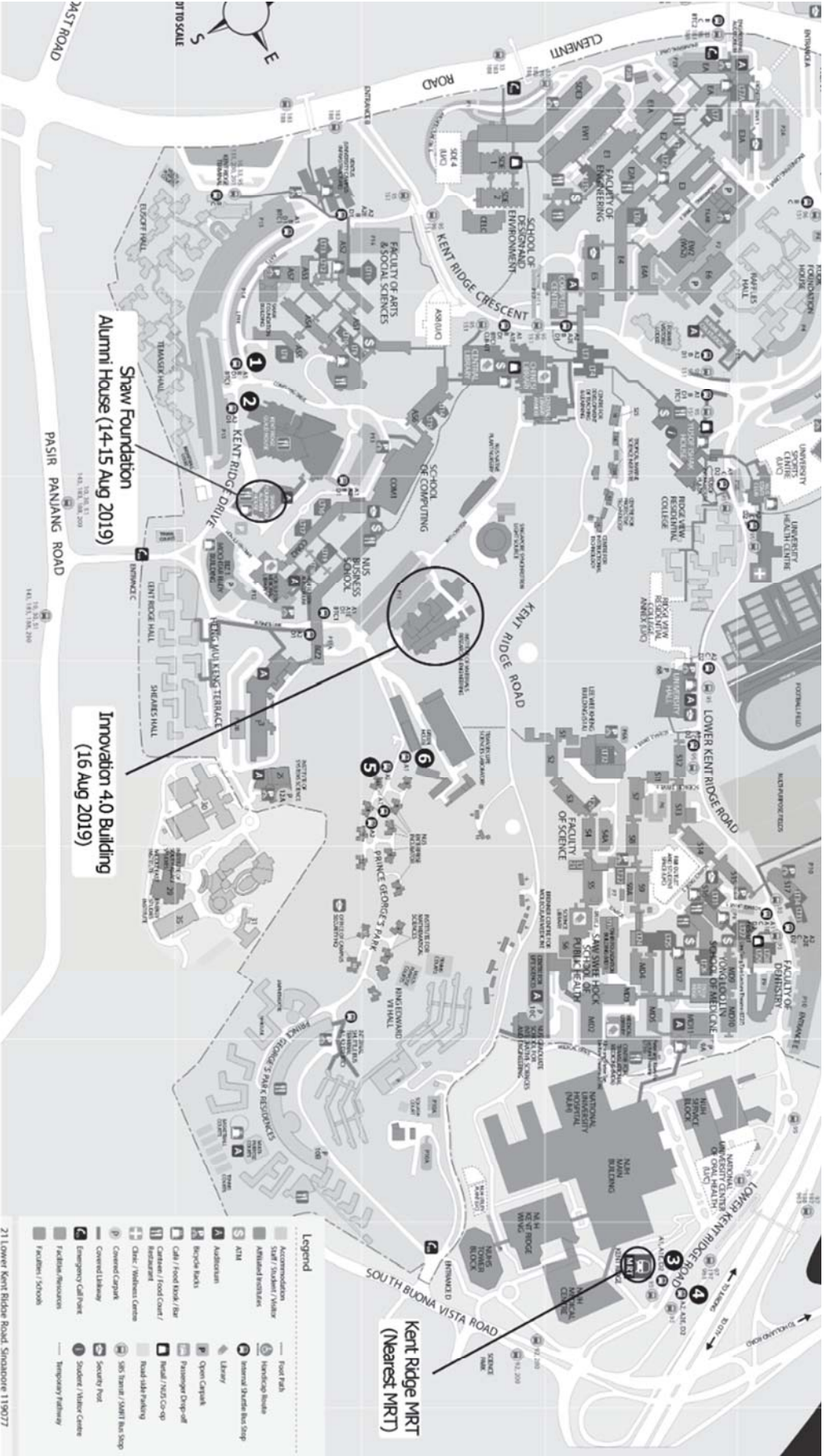**Option 3**: Driving

(from city)

- Drive along the AYER RAJAH EXPRESSWAY (AYE) towards Jurong
- Exit AYE (exit 8) and head towards SOUTH BUONA VISTA ROAD
- After passing the National University Health System building on your right, turn RIGHT into KENT RIDGE ROAD at the traffic junction
- Keep LEFT and turn LEFT into PRINCE GEORGE'S PARK road
- Continue on PRINCE GEORGE'S PARK road (down slope)
- The Innovation 4.0 Building is the LAST building at the end of slope on your RIGHT (right after the Temesak Life Sciences Lab)
- Park in any of the white carpark lots on the left of the building (Carpark 11B)

(from Pasir Panjang Road)

- From PASIR PANJANG ROAD, turn into NUS ENTRANCE C and into HENG MUI KENG TERRACE
- Keep RIGHT at the fork in front of the NUS Business School
- Immediately take the first LEFT towards PRINCE GEORGE'S PARK/RESEARCH LINK
- After passing under the NUS Business School Biz 2 Building and its open-air carpark (Carpark 11), turn left into Innovation 4.0 which the first building up the slope
- Park in any of the white carpark lots on the left of the building (Carpark 11B)

 Address: Innovation 4.0, 3 Research Link, Singapore **117602**

Note: For directions to Innovation 4.0 Building, you can call **+65 81266358** to find out more.

NUS Shuttle
Information

❶ AS 5
❷ Opp NUSS

❸ Kent Ridge MRT (Exit A)
❹ Opp Kent

❺ TCOMS
❻ Opp TCOMS

A1   A2   D2   D2

Shaw Foundation
Alumni House (14-15 Aug 2019)

Innovation 4.0 Building
(16 Aug 2019)

Kent Ridge MRT
(Nearest MRT)

21 Lower Kent Ridge Road, Singapore 119077

Legend

Conference Hotel Address

(Park Avenue Rochester)

Address: 31 Rochester Dr, Singapore 138637

https://parkavenueintl.com/parkavenuerochester/

Nearest MRT: Buona Vista Station

Remarks: In Singapore, the postal code is the most accurate way to find the location of one place and the way to arrive there, strongly recommend use google map together with postal code

LOGMS Special Activities

Day 1. "Night Out": *Satay by the Bay*

Have nice Singaporean food with cash coupons at Satay by the Bay, and enjoy wonderful attractions nearby!!

Option 1: take our ordered bus (**single way**)

Origin	Destination	Departure time
SFAH	Satay by the Bay	5:30pm

Option 2: take public transportation (Refer to the map below)

1. Get to **Bayfront** MRT station (CE1/DT16).
2. Exit MRT from **Exit C** and Cross the **Dragonfly Bridge** into Gardens by the Bay.
3. Walk along the Marina waterfront and follow the direction sign along the way (Approximately 8 - 10 minutes walk).

Google map link:

https://www.google.com.sg/maps/place/Satay+by+the+Bay/@1.2823359,103.8664049,17z/data=!3m1!4b1!4m5!3m4!1s0x31da191cded5a1a7:0x18350fb57623ecbe!8m2!3d1.2823359!4d103.8685936?hl=en

Option 3: take taxi using postal code

Address: 18 Marina Gardens Dr, #01-19, Singapore. Postal code: **018953**

Enjoy the freestyle night out! You may take nearest MRT or Taxi to go back.

Nearest MRT station: **Bayfront** (CE1/DT16)

Food: enjoy delicious BBQ seafood, Hainanese chicken rice, Malaysian delights and many other Singaporean food at Satay by the bay for free with 10 coupons worth $20

Nearby attractions: Natural scenery, garden and flower dome, light show and super tree (circled red in the map)

For shopping: Marina Bay Sands Singapore – Singapore landmark building

Day 2. Gala Dinner: *Raffles Marina*

Option 1: take our ordered bus (Highly recommended, since the dining place is quite far!)

Origin	Destination	Departure time
SFAH	Raffles Marina	4:45pm
Raffles Marina	Park Avenue Rochester Hotel	9:15pm

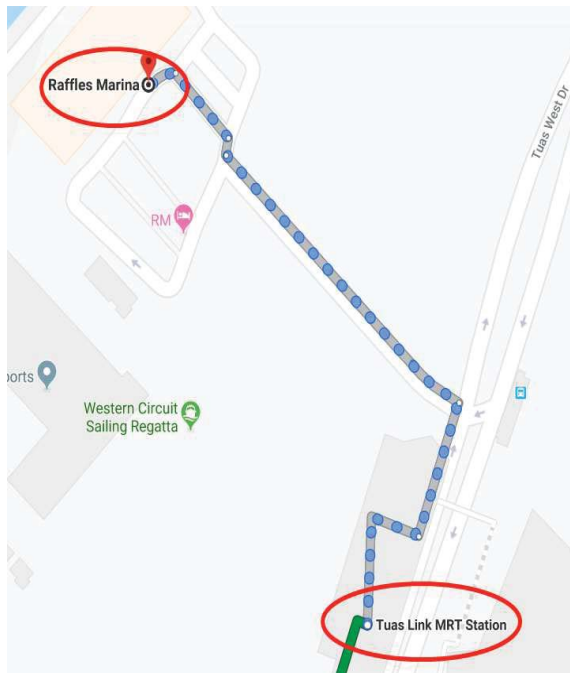**Option 2**: take public transportation

1. Exit from Tuas Link MRT station (EW33) Exit B and Head north on Tuas West Dr (Refer to the map below)
2. Turn left at the first cross and go along the road (Approximately 5 minutes walk)

Google map link:

https://www.google.com.sg/maps/place/Raffles+Marina/@1.342717,103.6357907,17z/data=!4m18!1m9!3m8!1s0x31da08b4bba45f3d:0x4de3f7812fceed3!2sRaffles+Marina!5m2!4m1!1i2!8m2!3d1.342717!4d103.6357907!3m7!1s0x31da08b4bba45f3d:0x4de3f7812fceed3!5m2!4m1!1i2!8m2!3d1.342717!4d103.6357907?hl=en

Option 3: take taxi (address: 10 Tuas West Dr, Singapore **638404**)

Map from Tuas Link MRT station (EW33) to Raffles Marina:

Day 3: *Port Tour*

Notes: Must bring along passport and conference badge for identification purpose.

Origin	Destination	Departure time
Innovation 4.0	PSA's Pasir Panjang container terminal	1:30pm
PSA's Pasir Panjang container terminal	Park Avenue Rochester Hotel	3:30pm

Remarks: In Singapore, the postal code is the most accurate way to find the location of one place and the way to arrive there, strongly recommend use google map together with postal code.