Time	Event					
08:20 - 09:00	Registration (Pre-Function Area)					
09:00 - 09:25	Opening Session (Picasso Room)					
	Prof. Wai Yuen SZETO Co-chair, INSTR2023: The 9 th International Symposium on Transport Network Resilience					
	Ir. Prof. Sai-Hung LAM The Secretary for Transport and Logistics, The Hong Kong SAR Government					
09:25 - 09:35	Group Photo Taking (Picasso Room)					
09:35 - 10:05	Keynote Session (Picasso Room) (Moderator: Dr. Ryan C.P. WONG)					
	Keynote speech by Prof. Hani MAHMASSANI William A. Patterson Distinguished Chair in Transportation, Northwestern University Title: Enhancing transportation system resilience through technology: Lessons from the pandemic					
10:05 – 10:35	Keynote speech by Prof. Yu-Chiun CHIOU Professor, Department of Transportation and Logistics Management, National Yang Ming Chiao Tung University Title: Driver scheduling models under stochastic travel times					
10:35 – 11:00	Coffee Break (outside the conference rooms)					
11:00 - 12:00	Keynote Session (Picasso Room) (Moderator: Dr. Ryan C.P. WONG)					
	Keynote speech by Prof. Fumitaka KURAUCHI Professor, Department of Civil Engineering, Gifu University Title: Vulnerability assessment of transportation and power networks considering interdependent struct Keynote speech by Prof. William H.K. LAM Emeritus Professor, Department of Civil and Environmental Engineering, The Hong Kong Polytechnic Univ. Title: A reliability-based path-finding algorithm with consideration of travel time and energy consumption uncertainties					
12:00 - 13:30	Symposium Lunch (Opera Room, B3 Level)					
13:30 - 15:00	Session A1 (Picasso Room) Transportation Network Reliability I	Session A2 (Monet Room A) Evacuation and Disaster Relief I	Session A3 (Monet Room B) COVID-19 and Epidemics	Session A4 (Picasso Room A) Logistics and Supply Chain I	Session A5 (Picasso Room B) Travel Behavior I	
15:00 – 15:30	Coffee Break (outside the conference rooms)					
15:30 – 17:00	Session B1 (Picasso Room) Travel Behavior II	Session B2 (Monet Room A) Network Vulnerability and Reliability	Session B3 (Monet Room B) Public Transportation I	Session B4 (Picasso Room A) Transportation Network Recovery	Session B5 (Picasso Room B) Stochastic Traffic Signal Control	
18:00 – 20:00	Symposium Banquet (Tsim Tung Ho Choi Seafood Restaurant)					

THE 9TH INTERNATIONAL SYMPOSIUM ON TRANSPORT NETWORK RESILIENCE https://www.institute-of-transport-studies.hku.hk/instr2023

Overview Schedule

Day 2: 14 December 2023 (Thursday)

Time	Event					
08:20 - 09:00	Registration (Pre-Function Area)					
09:00 - 10:30	Session C1 (Picasso Room) Traffic Flow and Control	Session C2 (Monet Room A) Autonomous Vehicles	Session C3 (Monet Room B) Transport Resilience	Session C4 (Picasso Room A) Big Data and Transportation	Session C5 (Picasso Room B) Public Transportation II	
10:30 – 10:50	Coffee Break (out	Coffee Break (outside the conference rooms)				
10:50 – 12:20	Session D1 (Picasso Room) Transportation Network Resilience I	Session D2 (Monet Room A) Shared Mobility	Session D3 (Monet Room B) Logistics and Supply Chain II	International Scientific Committee Meeting (Picasso Room A)	Session D4 (Picasso Room B) Bus Operations	
12:20 - 13:20	Symposium Lunch (Opera Room, B3 Level)					
13:20 – 14:50	Session E1 (Picasso Room) Evacuation and Disaster Relief II	Session E2 (Monet Room A) Rail System Vulnerability	Session E3 (Monet Room B) Transportation Network Resilience II	Session E4 (Picasso Room A) Pricing and Reward	Session E5 (Picasso Room B) Transport Planning and System Design	
14:50 – 15:10	Coffee Break (outside the conference rooms)					
15:10 – 16:40	Session F1 (Picasso Room) Rail Transportation	Session F2 (Monet Room A) Network Resilience and Recovery	Session F3 (Monet Room B) Traffic Prediction	Session F4 (Picasso Room A) Connected Vehicles and Traffic Assignment	Session F5 (Picasso Room B) Transportation Network Reliability II	
16:40 – 17:00	Closing Session (Picasso Room) Prof. Michael G.H. BELL Convenor, The International Symposium on Transport Network Resilience Dr. Jintao KE Co-chair, INSTR2023: The 9 th International Symposium on Transport Network Resilience					
	Prof. Nour-Eddin EL FAOUZI and Dr. Angelo FURNO Co-chairs, INSTR2026: The 10 th International Symposium on Transport Network Resilience					

Session A1: Transportation Network Reliability I

Session Chair: Dr. Y.H. KUO (Picasso Room)

RELIABILITY IMPROVEMENT WITH PARKING RESERVATION SERVICE CONSIDERING PARKING UNCERTAINTY

Xiaoyun WANG, Meng XU, and Haohan XIAO

THE OPTIMAL LINK ESTABLISHMENT PROBLEM FOR ENHANCING NETWORK CONNECTIVITY RELIABILITY 13:30 - 15:00 **UNDER MULTIPLE SCENARIO DISASTERS**

H. ANDO, F. KURAUCHI, and S. SUGIURA

IMPACT OF URBAN MORPHOLOGY ON THE RELIABILITY OF ELECTRIC ON-DEMAND FEEDER SERVICES

Yumeng FANG, Haruko NAKAO, Richard CONNORS, Tai-Yu MA, and Francesco VITI

Session A2: Evacuation and Disaster Relief I

Session Chair: Dr. Jacqueline LO (Monet Room A)

HOW DOES THE PROPORTION OF CHILDREN IN NEED AFFECT EVACUATION EFFICIENCY?

Hongliu LI and Jacqueline LO

13:30 - 15:00

EVACUATION ANALYSIS OF SUDDEN LARGE PASSENGER FLOW IN URBAN RAIL TRANSIT HUB: A CASE OF **BEJING SOUTH RAILWAY STATION**

Wenhui ZHAO and Meng XU

URBAN MULTI-MODAL TRANSPORTATION NETWORK RECOVERY STRATEGIES FROM A RESILIENCE PERSPECTIVE

Siyu CHEN, Jie LI, and Mengjia ZHANG

Session A3: COVID-19 and Epidemics

Session Chair: Dr. Wei LIU (Monet Room B)

HOW AIR TRANSPORT NETWORKS RESPOND TO LONG-LASTING DISRUPTIVE EVENTS LIKE COVID-19: THE FIRST STEP TOWARD LONG-TERM RESILIENCE

Siping LI and Yaoming ZHOU

13:30 - 15:00

VARIANT PATTERNS AND INFLUENCE OF INTER-REGIONAL TRAVEL DURING THE SARS-COV-2 EXPANSION IN **SOUTH AFRICA**

Weiyu LUO, Xin WU, and Chenfeng XIONG

EVALUATING TRAVEL BEHAVIOR RESILIENCE ACROSS METROPOLITAN AND RURAL AREAS DURING THE COVID-19 PANDEMIC: CONTRIBUTIONS OF VACCINATION AND EPIDEMIOLOGICAL INDICATORS

Haoning XI, John D. NELSON, David A. HENSHER, and Songhua HU

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Detailed Presentation Schedule Day 1: 13 December 2023 (Wednesday)

Session A4: Logistics and Supply Chain I

Session Chair: Prof. Anthony CHEN (Picasso Room A)

APPLYING PAGERANK FOR DETECTING CRITICAL NODES IN ROAD FREIGHT TRANSPORTATION NETWORK

M.A. KHAN, G. GRANDE, B. MEHRAN, and J.D. REGEHR

13:30 – 15:00 STOCHASTIC SERVICE NETWORK DESIGN FOR BUS-INTEGRATED FREIGHT TRANSPORT SYSTEMS

Jie LIN and Fangni ZHANG

ANALYSIS OF CONTAINER SHIPPING SCHEDULE STABILITY

Michael G.H. BELL, W. ZE, S. ZHU, and K.F. CHEUNG

Session A5: Travel Behavior I

Session Chair: Prof. Becky P.Y. LOO (Picasso Room B)

MEASURING CRASH-INDUCED TRAVEL DELAYS: AN APPROACH USING GPS DATA

<u>Ting LIAN</u> and Becky P.Y. LOO

13:30 – 15:00 HOW DO PEOPLE VALUE RELIABLE MODES IN THEIR TRANSIT PATH CHOICES?

Kwangho BAEK and Alireza KHANI

ASSESSING THE RELIABILITY OF ROUTE CHOICE SETS: CONSIDERING THE SIMILARITY BETWEEN ALTERNATIVES

H. WANG, E. MOYLAN, and D. LEVINSON

Session B1: Travel Behavior II

Session Chair: Dr. Sunghoon JANG (Picasso Room)

MODELING ROUTE CHOICE BEHAVIOR CONSIDERING DRIVERS' INFORMATION ACQUISITION PROCESS

Yuki ARAI and Daisuke FUKUDA

15:30 – 17:00 MULTIPLICATIVE ERRORS

Sunghoon JANG and Anthony CHEN

MODELLING ROUTE CHOICE BEHAVIOR UNDER RISKY TRAVEL TIME: A REGRETBASED APPROACH WITH

EMPIRICAL ANALYSIS OF ROUTE CHOICE BEHAVIOR UNDER TRAFFIC RESTRICTIONS DUE TO RECONSTRUCTION WORKS OF URBAN EXPRESSWAY

H. ANDO, Y. ASAKURA, S. NAKAGAWA, and T. MARUYAMA

Session B2: Network Vulnerability and Reliability

Session Chair: Prof. Kenetsu UCHIDA (Monet Room A)

DISCONNECTION DURATION TIME BETWEEN TWO NODES CONSIDERING CORRELATION AMONG LINK CLOSURES IN ROAD NETWORKS

R. TANI, K. UCHIDA, and A. SUMALEE

15:30 - 17:00

CRITICAL LINK SELECTION CRITERIA IN CONGESTIBLE TRANSPORT NETWORKS

M. CAVALERI, P. DELLE SITE, A. DONNO, and S. GHOSLYA

ANALYZING TRANSPORTATION NETWORK VULNERABILITY TO CRITICAL-LINK ATTACKS THROUGH TOPOLOGY CHANGES AND TRAFFIC VOLUME ASSESSMENT

L.D.C.H.N. KALPANA, Teppei KATO, and Kazushi SANO

Session B3: Public Transportation I

Session Chair: Prof. S.C. WONG (Monet Room B)

ROBUST INTEGRATED PLANNING ON EN-ROUTE CHARGER DEPLOYMENT AND CHARGING SCHEDULING FOR URBAN ELECTRIC BUS SYSTEMS

Yu ZHOU and Yun WANG

15:30 - 17:00

KNOWLEDGE GRAPH OF URBAN RAIL TRANSIT OPERATION INCIDENTS: CONSTRUCTION AND APPLICATIONS

Rui MA, Sanghuiyu YAN, and Jian LI

ADAPTIVE SCHEDULING OF ELECTRIC BUS SERVICES WITH STOP-SKIPPING PATTERN USING A REINFORCEMENT LEARNING APPROACH

Guang-Yu LI, Andy H.F. CHOW, and Cheng-Shuo YING

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Detailed Presentation Schedule Day 1: 13 December 2023 (Wednesday)

Session B4: Transportation Network Recovery

Session Chair: Prof. Yu JIANG (Picasso Room A)

RESILIENCE OPTIMAL-ORIENTED RESTORATION SCHEDULING OPTIMISATION FOR DISRUPTED TRANSPORTATION NETWORKS

Y. JIANG, <u>C.M. JIANG</u>, S.P. ZHONG, and J.Y. MIN

15:30 - 17:00

SURROGATE MODELING FOR RECOVERY MEASURES OPTIMIZATION TO IMPROVE TRAFFIC RESILIENCE

Q.L. LU, W. SUN, J. DAI, Jan-Dirk SCHMÖCKER, and C. ANTONIOU

INFERRING NETWORK CAPACITY REDUCTION AND DEMAND VARIATION AFTER DISRUPTIONS FOR RAPID

SYSTEM EVALUATION

S. Travis WALLER, Qingying HE, and Wei LIU

Session B5: Stochastic Traffic Signal Control

Session Chair: Prof. Hong K. LO (Picasso Room B)

COORDINATED SIGNAL CONTROL UNDER STOCHASTIC TRAFFIC DEMANDS AND TURNING RATIOS CONSIDERING SPATIAL-TEMPORAL DEPENDENCIES

 $\underline{\text{Lijuan WAN}}$ and Hong K. LO

15:30 - 17:00

STOCHASTIC PRIORITY-INTEGRATED COORDINATION FOR ARTERIAL SIGNAL CONTROL CONSIDERING UNCERTAINTY IN CONNECTED BUS OPERATION

Shiqi OU, Kun AN, Wanjing MA, Andreas HEGYI, and Bart VAN AREM

A REAL-TIME STOCHASTIC APPROACH TO LANE-BASED DELAY FORMULA FOR REAL-TIME ADAPTIVE SIGNAL

Jihye BYUN, Shin Hyoung PARK, <u>Seunghyeon LEE</u>, and S.C. WONG

Session C1: Traffic Flow and Control

Session Chair: Dr. Andy H.F. CHOW (Picasso Room)

STOCHASTIC LIGHTHILL-WHITHAM-RICHARDS TRAFFIC FLOW MODEL CONSIDERING CORRELATED RANDOM **PARAMETERS**

Tianxiang FAN, S.C. WONG, Zhiwen ZHANG, and Jie DU

09:00 - 10:30

INTELLIGENT TRAFFIC CONTROL WITH USE OF INTERNET-OF-THINGS AND REINFORCEMENT LEARNING **TECHNOLOGIES**

Zhongyang LU, Andy H.F. CHOW, and Chunwei YANG

INTELLIGENT INTERSECTION COORDINATION: A DYNAMIC CONTROL APPROACH FOR CONNECTED **AUTONOMOUS VEHICLE TRAFFIC MANAGEMENT**

Chunwei YANG, Andy H.F. CHOW, and Zhongyang LU

Session C2: Autonomous Vehicles

Session Chair: Dr. Zhan ZHAO (Monet Room A)

OPTIMAL DEPLOYMENT OF DEDICATED LANES FOR CONNECTED AND AUTONOMOUS VEHICLES IN MIXED **URBAN TRAFFIC NETWORKS**

D. NGODUY, S. LEE, C. NGUYEN, Z. ZHENG, and Hong K. LO

TRAFFIC ASSIGNMENT MODEL FOR MIXED FLOW OF UE-PRINCIPLED HUMAN-DRIVEN VEHICLES AND SO-PRINCIPLED AUTONOMOUS VEHICLES WITH STOCHASTIC LINK CAPACITY

Z. HU and <u>T. KATO</u> 09:00 - 10:30

> SHARED AUTONOMOUS VEHICLES PREFERENCE INVESTIGATION CONSIDERING RELIABILITY AND **PSYCHOLOGICAL FACTORS IN A CAMPUS ENVIRONMENT**

Zhiwu DONG, Xiaoyu YAN, Ziyi SHI, Pengsheng CAO, Shaowen XU, Xiqun (Michael) CHEN, and Der-Horng LEE

CUSTOMER CENTRIC & SMART RAILWAY MOBILITY

H.W. CHAN, Andy K.F. PANG, and Benny K.C. NG

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Detailed Presentation Schedule Day 2: 14 December 2023 (Thursday)

	Session C3: Transport Resilience Session Chair: Prof. Xiangdong XU (Monet Room B)			
09:00 – 10:30	ASSESSING ZONAL RESILIENCE: A STUDY ON THE IMPACT OF DAY-TO-DAY DISRUPTIONS ON THE ROAD NETWORK Piyush LALWANI and Sai CHAND			
	EVALUATING THE COMMUNITY RESILIENCE: A COMMUNITY-BASED PEER-TO-PEER RESOURCE-SHARING FRAMEWORK Zhengyang LI, Cynthia CHEN, and Anthony CHEN			
	SENSITIVITY-BASED APPROACH FOR CONGESTED TRANSIT ASSIGNMENT ON SKIP-AND-STOP METRO SYSTEM			

Sion KIM, Donggyun KU, In-Ho LEE, Seunghyeon LEE, and Seungjae LEE

Session C4: Big Data and Transportation Session Chair: Dr. Wei MA (Picasso Room A) TRAFFIC UNCERTAINTY PREDICTION WITH A HYBRID KALMAN FILTER BASED DEEP NEURAL NETWORK Xinyue WU, Andy H.F. CHOW, Wei MA, William H.K. LAM, and S.C. WONG A DATA-DRIVEN APPROACH FOR URBAN ROAD NETWORK RESILIENCE ASSESSMENT: INTEGRATING SPATIOTEMPORAL ANALYSIS WITH RESILIENCE TRIANGLE CONCEPT Rouzbeh AZARGOSHASBI, Lina KATTAN, and Mohammad ANSARI ESFEH MODELLING NETWORK-WIDE TRAFFIC CONDITION ESTIMATION CONSIDERING UNCERTAINTIES AND SPARSE MULTI-TYPE DETECTORS Shao-Jie LIU, Hao FU, William H.K. LAM, and Wei MA

	Session C5: Public Transportation II Session Chair: Dr. Sujun SUN (Picasso Room B)		
	ROBUSTNESS OF ON-DEMAND PUBLIC TRANSPORT NETWORKS FROM A RANDOM NETWORK PERSPECTIVE Jin-Yang LI and Jing TENG		
09:00 – 10:30	OPTIMAL SEAT OCCUPANCY OF CUSTOMIZED BUS SERVICES CONSIDERING IN-VEHICLE INFECTION RISK COST DURING PUBLIC HEALTH EMERGENCIES S. HAO, F. DING, Y. CHEN, and S. SUN		
	IMPACT OF WEATHER ON PUBLIC TRANSPORT: A STUDY OF BUS RIDERSHIP IN THE WEST MIDLANDS OF THE UK USING SMART CARD DATA Y. HUANG, Q. FU, D.J. JAROSZWESKI, and J.M. EASTON		

Session D1: Transportation Network Resilience I

Session Chair: Dr. Fangni ZHANG (Picasso Room)

A NETWORK FLOW APPROACH FOR MODELLING CONCURRENT RESTORATION PROBLEM

Yiyang PENG, Min XU, Guoyuan LI, and Anthony CHEN

ASSESSING AND IMPROVING TRANSIT SYSTEM REDUNDANCY WITH NETWORK WIDE CAPACITY 10:50 - 12:20

Heqing TAN, Xiangdong XU, and Anthony CHEN

MODELING ADAPTIVE CAPACITY OF TRANSPORTATION NETWORK

Yu GU and Anthony CHEN

Session D2: Shared Mobility

Session Chair: Dr. Zheng ZHU (Monet Room A)

MULTI-PLATFORM GAME AND OPERATION OF EBIKE-BIKE SHARING SYSTEMS BASED ON REINFORCEMENT **LEARNING**

Ziyi SHI and Zheng ZHU

10:50 - 12:20 RISK-AVERSE DYNAMIC SYSTEM OPTIMAL TRAFFIC ASSIGNMENT FOR RIDE-SHARING SYSTEMS

Riki KAWASE

OPTIMAL COMPENSATION SCHEME DESIGN FOR INTEGRATIVE SHARED MOBILITY SERVICES

Jiangyan HUANG and Min XU

Session D3: Logistics and Supply Chain II

Session Chair: Dr. Ran YAN (Monet Room B)

AN EXTENDED SMART 'PREDICT, AND OPTIMIZE' (SPO) FRAMEWORK BASED ON SIMILAR SETS FOR SHIP INSPECTION PLANNING

Ran YAN, Shuaian WANG, and Lu ZHEN

10:50 - 12:20

USING TWITTER DATA TO ESTIMATE TRUCK DELAY COSTS DUE TO MOTOR VEHICLE COLLISIONS ON RURAL HIGHWAYS IN ALBERTA, CANADA

S. ABOLHOSEINI, P.K. PATNALA, J.D. REGEHR, and B. MEHRAN

EMERGENCY RESPONSE RESOURCE ALLOCATION CONSIDERING VEHICLE TYPES

Changle SONG, David LEVINSON, and Emily MOYLAN

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Detailed Presentation Schedule

Day 2: 14 December 2023 (Thursday)

International Scientific Committee Meeting

Chair: Prof. Michael G.H. BELL (Picasso Room A)

10:50 - 12:20

All International Scientific Committee members

Session D4: Bus Operations

Session Chair: Dr. Enoch LEE (Picasso Room B)

THE ROLE OF RIGHT TURNS IN BUS OPERATION

T. XIAN, J.D. NELSON, and E. MOYLAN

10:50 - 12:20

INTEGRATION OF FLEXIBLE BUS AND PARCEL DELIVERY UNDER STOCHASTIC DEMAND AND SERVICE TIME

Enoch LEE, Manzi LI, and Hong K. LO

BUS ROUTING-SCHEDULING DESIGN UNDER STOCHASTIC DEMAND

Yingying LIN, Wei HUANG, and Jiemin XIE

Session E1: Evacuation and Disaster Relief II

Session Chair: Prof. Jan-Dirk SCHMÖCKER (Picasso Room)

SIMULATING PEDESTRIAN EVACUATION IN HALL USING ARTIFICIAL INTELLIGENT ALGORITHM

B.L. CEN, Y. XUE, and K. ZHANG

13:20 - 14:50

ENDOGENOUS STOCHASTIC EVACUATION OPTIMISATION FOR DRONE-ASSISTED EVACUATION

Jose ESCRIBANO, Ali Gul QURESHI, Jan-Dirk SCHMÖCKER, and Panagiotis ANGELOUDIS

EQUITABLE SEQUENCE TO RESTORE TRANSPORTATION NETWORK LINKS AFTER EXTREME DISASTER

K.C. WIJAYA and K. SAKAI

Session E2: Rail System Vulnerability

Session Chair: Dr. Yili TANG (Monet Room A)

EVALUATING THE FLOODING LEVEL IMPACTS ON URBAN METRO NETWORKS AND TRAVEL DEMAND: BEHAVIORAL ANALYSES, AGENT-BASED SIMULATION, AND LARGE-SCALE CASE STUDY

B. ZHAO, Y. TANG, C. WANG, S. ZHANG, and K. SOGA

13:20 - 14:50

THE VULNERABILITY EVALUATION OF METRO STATIONS - A CASE STUDY IN WUHAN, CHINA

Shuyang ZHANG, Chenglu WANG, Manzi LI, Guojun CHEN, and Haode LIU

UNDERSTANDING EVOLUTION OF URBAN RAIL TRANSIT SYSTEM VULNERABILITY UNDER NETWORK EXPANSION: A CASE STUDY OF HONG KONG MTR NETWORK

Yingying XU, Yu GU, and Anthony CHEN

Session E3: Transportation Network Resilience II

Session Chair: Prof. Biyu CHEN (Monet Room B)

HOW THE RISE OF TRUCKS HAS REDUCED NETWORK TRAFFIC THROUGHPUT

Yang GAO and David LEVINSON

13:20 - 14:50

OPTIMIZATION OF RESELLING CANCELED ORDERS STRATEGY USING DEEP Q-NETWORKS WITH A CASE STUDY OF THE STEEL SLITTING INDUSTRY

Yang DENG, Andy H.F. CHOW, Zhili ZHOU, and Chengshuo YING

RELIABLE LIFELONG PLANNING A*: TECHNIQUE FOR REOPTIMIZING RELIABLE SHORTEST PATHS IN DYNAMIC **NETWORKS**

Wenxin TENG and Biyu CHEN

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Detailed Presentation Schedule

Day 2: 14 December 2023 (Thursday)

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Session	- Δ:	Pricing	and	Reward
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Session Chair: Dr. Xiaoran QIN (Picasso Room A)

RESILIENT PRICNG: PROACTIVELY BUILDING UP NETWORK RESILIENCE VIA CONGESTION PRICING

 $\underline{\text{Kai QU}}$, Xiangdong XU, and Anthony CHEN

13:20 - 14:50

CREDIT CHARGE-CUM-REWARD SCHEME FOR GREEN MULTI-MODAL MOBILITY

Hongxing DING, Hai YANG, Xiaoran QIN, and Hongli XU

 ${\bf SPATIAL\text{-}TEMPORAL\ PRICING\ FOR\ COMPETITIVE\ RIDE\text{-}SOURCING\ PLATFORMS\ BASED\ ON\ MULTI-AGENT}$

REINFORCEMENT LEARNING METHOD

Chuqiao CHEN, Haonan YANG, Chujiu ZHAI, Xiqun CHEN, and Dong MO

Session E5: Transport Planning and System Design

Session Chair: Dr. Haruko NAKAO (Picasso Room B)

OPTIMAL MIXED FLEET AND CHARGING INFRASTRUCTURE PLANNING TO ELECTRIFY DEMAND RESPONSIVE FEEDER SERVICES UNDER STOCHASTIC DEMAND

Haruko NAKAO, Tai-Yu MA, Richard CONNORS, Francesco VITI, and Yumeng FANG

13:20 - 14:50

ENHANCING TRANSPORTATION NETWORK RESILIENCE BY REDUNDANT DESIGN: A COMPACT MATHEMATICAL PROGRAMMING APPROACH

Zijian WANG, Xiangdong XU, Xiangyi FAN, and Yonglei XU

A STUDY ON THE DESIGN OF A RESERVATION SYSTEM FOR URBAN TRANSPORT SERVICES UNDER

UNCERTAINTY

Koki SATSUKAWA, Yusuke HARA, Yosuke KAWASAKI, and Takamasa IRYO

Session F1: Rail Transportation

Session Chair: Dr. Ka Ho TSOI (Picasso Room)

RAILWAY RESILIENCE: PASSENGER-HOUR DELAYS UPON SERVICE DISRUPTIONS

Ka Ho TSOI and Becky P.Y. LOO

15:10 - 16:40

A BI-LEVEL DEEP REINFORCEMENT LEARNING FRAMEWORK FOR METRO TRAIN SCHEDULING AND SPEED **CONTROL UNDER STOCHASTIC DISTURBANCES**

Shouyi WANG, Yanzuo LIN, and Andy H.F. CHOW

AN EMERGENCY DISPATCH MODEL FOR DOCKLESS SHARED BICYCLES IN RESPONSE TO METRO **DISRUPTIONS**

Rui XU, Xinyuan WANG, Junlong ZHANG, and Jian LI

Session F2: Network Resilience and Recovery

Session Chair: Prof. Yu ZHOU (Monet Room A)

ASSESSING RESILIENCE OF MULTI-MODAL TRANSIT NETWORKS: AN ACTIVITY-BASED ACCESSIBILITY ANALYSIS

Yuqing ZHOU and Xiao FU

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15:10 - 16:40

ALGORITHMS FOR OPTIMAL REPAIR SEQUENCING OF DAMAGED ROADS AFTER DISASTERS

Jaswant SINGH and Hemant GEHLOT

DYNAMIC MOBILITY MANAGEMENT FOR HETEROGENEOUS POST-DISASTER POPULATION WITH HIDDEN MARKOV MODEL - A CASE STUDY IN SRI LANKA

D.H.M.K.S. THALGASKOTUWA and E. HATO

Session F3: Traffic Prediction

Session Chair: Prof. Simon HU (Monet Room B)

NETWORK-LEVEL TRAFFIC STATE ESTIMATION METHOD FOR MULTIPLE TIME PERIODS CONSIDERING THE MISSING TRAFFIC DATA

R. TANI, K. UCHIDA, and Anthony CHEN

15:10 - 16:40

A POISSON-BASED DISTRIBUTION LEARNING FRAMEWORK FOR SHORT-TERM PREDICTION OF FOOD DELIVERY **DEMAND RANGES**

Jian LIANG and Jintao KE

MASTGAT: A MULTI-ATTRIBUTE SPATIAL-TEMPORAL GRAPH ATTENTION NETWORK FOR TRAFFIC PREDICTION

Xinlong HUANG, Renxin ZHONG, Panagiotis ANGELOUDIS, Michael G.H. BELL, Der-Horng LEE, and Simon HU

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Day 2: 14 December 2023 (Thursday)

Session F4: Connected Vehicles and Traffic Assignment

Session Chair: Prof. Yun WANG (Picasso Room A)

RESIDUAL VEHICLE EFFECTS ON VARIABILITY ESTIMATION OF CONNECTED VEHICLE PENETRATION RATE

Shaocheng JIA, S.C. WONG, and $\underline{\text{Wai WONG}}$

MODELING INSTANTANEOUS QUEUING EFFECT IN TRAFFIC ASSIGNMENT PROBLEMS UNDER DEMAND VARIATION

Yuxin SHI, Hao FU, William H.K. LAM, H.W. HO, Mei Lam TAM, and Wei MA

BOUNDEDLY RATIONAL CONTINUUM USER EQUILIBRIUM MODEL FOR SIMULTANEOUS DEPARTURE TIME AND

ROUTE CHOICE IN TRAFFIC ASSIGNMENT PROBLEMS

Liangze YANG, Jie DU, S.C. WONG, and Chi-Wang SHU

Session F5: Transportation Network Reliability II

Session Chair: Dr. Haoning XI (Picasso Room B)

HABITUAL PUBLIC TRANSPORT USE AS A SOURCE OF RELIABILITY

 $\underline{\text{Durba KUNDU}}, \text{Somwrita SARKAR, and Emily MOYLAN}$

OPTIMAL PUBLIC TRANSPORT FARE WITH DELAY INSURANCE TO IMPROVE TRAVEL TIME RELIABILITY

Yihe ZHOU, Wenzhe SUN, and Jan-Dirk SCHMÖCKER

ESTIMATION OF INDIVIDUAL-LEVEL PARAMETERS FOR A JOINT ROUTE AND DEPARTURE-TIME CHOICE MODEL CONSIDERING TRAVEL TIME RELIABILITY

<u>Dai TAMAGAWA</u>, Mariko NAKAI, Shinji NAKAGAWA, Daisuke FUKUDA, Makoto CHIKARAISHI, and Yasuo ASAKURA

15:10 - 16:40