

9th INFORMS Transportation Science and Logistics Society Workshop
Indian Institute of Management Ahmedabad
December 13-15, 2021 (Virtual)

Website: <https://conference.iima.ac.in/tsl2021/>

Link for Registration: <https://conference.iima.ac.in/tsl2021/registration-and-payment.php>

Day 1 – Monday 13th December, 2021				
CST	IST	CET	EST	Program
12:00	09:30	05:00	23:00	Inaugural Session: Inauguration of the 9th INFORMS TSL Workshop
12:15	09:45	05:15	23:15	Opening Remarks and Presentation: Decision Areas in E-commerce and Workshop Topics Presentation by Debjit Roy
12:45	10:15	05:45	23:45	Keynote Talk: Customer Experience in E-Commerce Speaker: Ravi Vijayaraghavan (Senior Vice President and Head, Analytics and Applied Sciences, Flipkart) Moderator: Debjit Roy
13:45	11:15	06:45	00:45	BREAK
				Session 1: Addressing E-Commerce Challenges in Emerging Economy – I Session Chair: Srikumar Krishnamoorthy
14:00	11:30	07:00	01:00	Integrated last mile delivery and workforce scheduling to meet demand surges in e-commerce retail: Saurabh Chandra and Amit K Vatsa (Indian Institute of Management Indore)
14:25	11:55	07:25	01:25	A case study for last-mile routing in B2B E-commerce: V Surya, Mohit Kumar, Aman Deep Singh and Alok Patel (Udaan)
14:50	12:20	07:50	01:50	Last mile delivery planning & orchestration – India topology review & challenges: Kishore Lanka and Kalyana C Chejarla (Indian Institute of Management Kozhikode)
15:15	12:45	08:15	02:15	Challenges & opportunities using EVs for last mile e-commerce / e-grocery deliveries: Karan Kadaba (3ev Industries Private Limited)
15:40	13:10	08:40	02:40	Cost-quality performance trade-offs in multi-line e-commerce order fulfillment-picking, batching, and last-mile delivery: Gyanesh Raj and Debjit Roy (Indian Institute of Management Ahmedabad)
16:05	13:35	09:05	03:05	BREAK
17:00	14:30	10:00	04:00	Panel discussion on Last Mile Delivery Moderator: Tom van Woensel Panelists: 1. Abhinay Choudhari, Co-Founder, BigBasket 2. Suraj Saharan, Co-Founder, Delhivery 3. Martin Savelsbergh, Professor, Georgia Institute of Technology 4. Lei Zhao, Associate Professor, Tsinghua University

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				Session 2: Order fulfillment Decision – I Session Chair: Diptesh Ghosh
18:30	16:00	11:30	05:30	An investigation of emissions for the last mile delivery with drones and delivery robots: Cheng Chen and Emrah Demir (Fujian Agriculture and Forestry University China, Cardiff University UK)
18:55	16:25	11:55	05:55	An optimal plan for autonomous last mile deliveries to improve energy-efficiency: A Case of Chalmers University, Sweden: Lokesh Kalahasthi and Iván Sánchez-Díaz (Chalmers University of Technology, Sweden)
19:20	16:50	12:20	06:20	A machine learning approach for determining the optimal packaging box assortment: Shanthan Kandula, Srikumar Krishnamoorthy and Debjit Roy (Indian Institute of Management Ahmedabad)
19:45	17:15	12:45	06:45	Dynamic inventory relocation for a one-way electric car sharing system with uncertain demand: Rui Liu, Shu Zhang and Ping Chen (Chongqing University, Nankai University China)
20:10	17:40	13:10	07:10	Dynamic pickup and delivery problem with shared electric vehicles: Yutong Gao and Shu Zhang (School of Economics and Business Administration, Chongqing University, China)
20:35	18:05	13:35	07:35	BREAK
				Session 3: Vehicle Routing Session Chair: Prahalad Venkateshan
20:50	18:20	13:50	07:50	Tactical inventory routing with stochastic demand and supply: Umur Hasturk, Albert H. Schrottenboer, Evrim Ursavas and Kees Jan Roodbergen (University of Groningen, Eindhoven University of Technology; Netherlands)
21:15	18:45	14:15	08:15	An application of the clustered generalized vehicle routing problem: Order consolidation for e-tailers: Sajjad Hedayati, Mostafa Setak, Emrah Demir and Tom Van Woensel (K. N. Toosi University of Technology; Iran, Cardiff University; UK, Eindhoven University of Technology)
21:40	19:10	14:40	08:40	A branch-cut-and-price algorithm for the time-dependent electric vehicle routing problem with time windows: Gonzalo Lera Romero, Juan Jose Miranda Bront and Francisco Soullignac (CONICET-Universidad de Buenos Aires. Instituto de Investigación en Ciencias de la Computación (ICC); Argentina, Universidad Torcuato Di Tella / Consejo Nacional de Investigaciones Científicas y Técnicas)
22:05	19:35	15:05	09:05	Vehicle routing optimization with relay: an arc-based column generation approach; Alexandre Jacquillat, Alexandria Schmid and Kai Wang (Massachusetts Institute of Technology, Carnegie Mellon University, Heinz College of Public Policy and Information Systems)
22:30	20:00	15:30	09:30	A chance-constrained two-echelon vehicle routing problem with stochastic demands Natasja Sluijk, Alexandre De Macedo Florio, Joris Kinable, Nico Dellaert and Tom Van Woensel (Eindhoven University of Technology, Netherlands)

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Day 2 – Tuesday 14 th December, 2021				
CST	IST	CET	EST	Program
				Session 4: Addressing E-Commerce Challenges in an Emerging World-II Session Chair: Sandip Chakrabarti
11:45	09:15	04:45	22:45	Viability of consolidation centre in urban freight delivery management in tier 2 cities: Garima (School of Planning and Architecture, Bhopal)
12:10	09:40	05:10	23:10	Impact of transportation infrastructure on informal firm productivity: a pseudo panel data analysis: Lokesh Posti and Atanu Bhuyan (Indian Institute of Management Kashipur)
12:35	10:05	05:35	23:35	Urban mobility and sustainable passenger transport: identifying critical success factors for India: Murari Srinivasa and Rajluxmi V. Murthy (Indian Institute of Management Bangalore)
13:00	10:30	06:00	00:00	A production routing problem with crowd-shipping: Sawyasachi Awasthi, Dr. Priyanka Verma and Balkrishna Eknath Narkhede (National Institute of Industrial Engineering, Mumbai)
13:25	10:55	06:25	00:25	BREAK
				Session 5: Addressing E-Commerce Challenges in an Emerging World-III Session Chair: Chetan Soman
14:05	11:35	07:05	01:05	Resilient supply chain network design for production and distribution planning: Ramesh Kumar, L Ganapathy, Ravindra Gokhale and Manoj Kumar Tiwari (National Institute of Industrial Engineering [NITIE])
14:30	12:00	07:30	01:30	Smart hydroponics – disrupting the farms to forks supply chain: Nayantara Mehta and Yash Malik (Bigbasket, Fractal Analytics)
14:55	12:25	07:55	01:55	E-Grocery sellers last-mile logistics challenges: with special reference to Coimbatore city during COVID-19 pandemic period: Bamini Rajasekharan and Karnika Gayathri Rajasekharan (Sri Ramkrishna College of Arts India, Robert Gordon University UK)
15:45	13:15	08:45	02:45	BREAK
				Session 6: Intralogistics Session Chair: Debjit Roy
20:00	17:30	13:00	07:00	Anticipatory order picking: Son T. Tran, Rui J. Almeida and Christof Defryn (Maastricht University, Netherlands)
20:25	17:55	13:25	07:25	Dynamic time-based parcel consolidation, vehicle selection and container loading in hyperconnected logistic hubs: Nidhima Grover and Benoit Montreuil (Georgia Institute of Technology, United States)
20:50	18:20	13:50	07:50	Order picking with in-store customers and collaborative robots in retail stores: Joyjit Bhowmick, Jennifer Pazour and Iman Dayarian (Rensselaer Polytechnic Institute, University of Alabama, United States)
21:15	18:45	14:15	08:15	The value of limited adaptability for workload balance in parcel sort systems: Reem Khir, Alan Erera and Alejandro Toriello (Georgia Institute of Technology)

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21:40	19:10	14:40	08:40	Cross-dock truck scheduling with worker constraints: Ritesh Ojha and Alan Erera (Georgia Institute of Technology)
22:05	19:35	15:05	09:05	BREAK
22:25	19:55	15:25	09:25	Keynote Talk: Same-Day Delivery with Fair Customer Service Speaker: Barrett Thomas, Professor of Business Analytics, Tippie College of Business, University of Iowa Moderator: Debjit Roy
				Session 7: Network Design Session Chair: Joris Kinable
23:30	21:00	16:30	10:30	Service network design for city logistics: Albert Schrottenboer and Martin Savelsbergh (Eindhoven University of Technology Georgia Institute of Technology)
23:55	21:25	16:55	10:55	Who has access to e-commerce and when? time-varying service regions in same-day delivery: Dipayan Banerjee, Alexander Stroh, Alan Erera and Alejandro Toriello (Georgia Institute of Technology)
00:20	21:50	17:20	11:20	Middle mile consolidation network design problems: a time-constrained continuous rate model: Lacy Greening, Mathieu Dahan and Alan Erera (Georgia Institute of Technology)
00:45	22:15	17:45	11:45	Stochastic intra-city service network design: Ozgur Satici and Iman Dayarian (University of Alabama)

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Day 3 – Wednesday 15 th December, 2021				
CST	IST	CET	EST	Program
18:30	16:00	11:30	05:30	Panel Discussion 2: E-Commerce Fulfilment Moderator: Rene de Koster Panelists: 1. Samay Kohli, CEO & Co-Founder, GreyOrange 2. Rohit Sharma, Head of Supply Chain, Grofers 3. Kai Furmans, Professor, Karlsruhe Institute of Technology 4. Martijn van Paradijs, Sr. Distribution Center Manager EMEA – Timberland / Icebreaker / Altra VF Corporation
				Session 8: Order-Fulfillment Decisions – II Session Chair: Sachin Jayaswal
19:50	17:20	12:50	06:50	A pricing mechanism to improve capacity utilisation in ridesharing: Srikanth Krishnaprasad and Rajeev Tripathi (Indian Institute of Management Bangalore, Great Lakes Institute of Management)
20:15	17:45	13:15	07:15	Dynamic pricing in advanced booking platforms: Neha Sharma, Milind Sohoni, Sumanta Singha and Achal Bassamboo (Kellogg Northwestern USA, Indian School of Business)
20:40	18:10	13:40	07:40	Dynamic order assignment in e-commerce order fulfillment under disruption risk: Govind Kumawat and Debjit Roy (Indian Institute of Management Udaipur, Indian Institute of Management Ahmedabad)
21:05	18:35	14:05	08:05	Robust drone-aided delivery: Yu Yang, Chiwei Yan and Yufeng Cao (University of Florida)
21:30	19:00	14:30	08:30	An efficient shortest path based routing heuristic for drone-assisted delivery problems: Abhishake Kundu, Ricardo Gatica Escobar and Timothy I. Matis (Texas Tech University; United States, Pontificia Universidad Católica de Valparaíso; Chile)
21:55	19:25	14:55	08:55	Closing Remarks by Karen Smilowitz (Northwestern University, Illinois)