

First day- 24th Nov 2021

9:00-9:10	welcome and introductory points and housekeeping		
9:10-10:00	Prof Mike Batty "More Than One Digital Twin: An Ecology of Model Applications in East London"		
10:10-10:20	Coffee break		
10:20-11:35	Zhiyong Zhou, Robert Weibel, Kai-Florian Richter and Haosheng Huang	Towards a hierarchical indoor data model from a route perspective	Wayfinding and Navigation Systems
	Fangli Guan, Zhixiang Fang and Haosheng Huang	Representation and modelling of the complexity of street intersections for navigation guidance	
	Laure De Cock, Nico Van de Weghe, Kristien Ooms and Philippe De Maeyer	Adaptive mobile indoor route guidance, the next big step	
	Tong Qin, Weihua Dong and Haosheng Huang	Indoor wayfinding in real-world environments and virtual reality: A comparison	
	Jingyi Zhou, Jie Shen, Jiafeng Shi and Litao Zhu	Indoor navigation path visualization method considering the spatial characteristics	
11:35-11:45	break		
11:45-13:00	Guenther Retscher, Pajtim Zariqi, Ana Oliva Pinilla Pachon, José Pablo Ceballos Cantu and Sasanka Madawalagama	Bluetooth Distance Estimation for COVID-19 Contact Tracing	Positioning
	Till Weigert and Guenther Retscher	Positioning Performance Evaluation of a Dual Frequency Multi-GNSS Smartphone	
	Delphine Isambert, Paul Chambon and Alexandre Vervisch Picois	PPP-RTK : the advantageous result of a hybridization of GNSS accurate positioning techniques	
	Maryam Jafari Tafazzol and Mohammad Reza Malek	A New Method for Indoor Positioning Based on Integrating Wireless Local Area Network, Bluetooth Low Energy, and Inertial Sensors	
	Wioleta Błaszczak-Bąk, Guenther Retscher, Joanna Janicka, Marcin Uradziński, Michał Bednarczyk and Jelena Gabela	Dual-frequency GNSS/Wi-Fi smartphone navigation	
13:00-13:40	Lunch		
13:40-14:30	Dr Urska Demsar "Studying migratory bird navigation with spatial data science"		
14:30-14:45	break		
14:45-16:00	Simon Gröchenig and Karl Rehrl	Towards C-ITS-based communication between bicycles and automated vehicles	

16th Conference on Location Based Services -first draft Programme

	Amna Anwar and Eiman Kanjo	Crime Prevention on the Edge: Designing a Crime-Prevention System by Converging Multimodal sensing with Location-Based Data	Location tracking and systems
	Caner Guney, Emre Tuncel and Hakan Ulagan	Employee Location Tracking in Retail Stores	
	Guilherme Spinoza Andreo, Ioannis Dardavesis, Michiel de Jong, Pratyush Kumar, Maundri Prihanggo, Georgios Triantafyllou, Niels van der Vaart and Edward Verbree	Building Rhythms: Reopening The Workspace With Indoor Localisation	
	Saman Shafipour, Mahmoud Reza Delavar and Abbas Babazadeh	Modeling accident hotspots to locate roadside equipment based on intelligent transportation system	
16:00-16:10	break		
16:10-17:00	Dr Ross Purves "Location, place and language"		

Second day- 25th Nov 2021

9:00-9:50	Matt Duckham "LBS and Indigenous Data Sovereignty"		
9:50-10:00	break		
10:00-11:15	James Williams, James Pinchin, Adrian Hazzard and Gary Priestnall	Survey of Leisure Walking Behaviours and Activity Tracking Use: Emerging Themes and Design Considerations	Mobility and Activity Analytics
	Jing Huang and Tong Zhang	Personalized POI recommendation using deep reinforcement learning	
	Irma Kveladze, Pelle Rosenbeck Gøeg and Niels Agerholm	Understanding Mobility of Aalborg Commuters: A case study with a Floating Car Datasets	
	Francisco Porras Bernardez and Georg Gartner	Climate change and populists in geolocated Twitter	
	Ali Hosseinpour	A Real-Time Spatio-Temporal Bigdata System for Instant Analysis of Twitter Data to Monitor of Advertising Campaigns; Case Study New York City	
11:15-11:30	Break		
11:30-13:00	Florian Ledermann	Small differences: Limits of Legibility of Cartographic Symbols on High- and Ultra-High-Resolution Mobile Displays	Visualization, Perception and Analysis
	Zhenyu Liu, Runnan Fu, Linjun Wang, Yuzhen Jin, Theodoros Papakostas, Xenia Una Mainelli, Robert Voûte and Edward Verbree	Game Engine-based Point Cloud Visualization and Perception for Situation Awareness of Crisis Indoor Environments	
	Lars Sloover, Laure De Cock, Bart De Wit, Samuel Van Ackere and Nico Van de Weghe	On the Detection of Moving Objects in Laser Scan Data: the Highest Point of Interest (HPOI) Method	
	Gabriel Kerekes and Volker Schwieger	Towards Perceived Space Representation using Brain Activity, Eye-Tracking and Terrestrial Laser Scanning	
	Mina Karimi, Mohammad Saedi Mesgari and Omid Reza Abbasi	What Can I Do There? Extracting Place Functionality Based on Analysis of User-Generated Textual Contents	
	Litao Zhu, Jie Shen and Georg Gartner	Ontology-driven context-aware recommendation method for indoor navigation in large hospitals	
13:00-13:45	Lunch		
13:45-15:10	Fateme Teimouri and Kai-Florian Richter	"Straight? What straight?" Investigating navigation instructions' applicability	Best papers session

16th Conference on Location Based Services -first draft Programme

	Jerome Dreyer, Sven Heitmann, Felix Erdmann, Gernot Bauer and Christian Kray	"Informed" consent in popular location based services and digital sovereignty	
	Achituv Cohen, Sagi Dalyot and Asya Natapov	Machine Learning for Predicting Pedestrian Activity in Cities	
	Vilma Jokinen, Ville Mäkinen, Anna Brauer and Juha Oksanen	Would citizens contribute their personal location data to an open database? Preliminary results from a survey	
	Eun-Kyeong Kim, Elena Ebert and Robert Weibel	The Effect of Post-Processing in Stop-Move Detection of GPS Data	
15:10- 15:30	break		
15:30- 16:20	Dr Anita Graser "Open LBS Research: Why (not)?"		
16:20- 16:30	Closing remarks, best papers awards, next year conference		