

Date: Wednesday, 07/May/2025

8:30am - 9:15am Dipoli/Käpyaula	REG: LBS2025 Registration Location: Dipoli/Käpyaula Dipoli, Otakaari 24, 02150 Espoo
9:00am - 9:15am Dipoli/Käpyaula	COF1: Coffee to go Location: Dipoli/Käpyaula
9:15am - 9:30am Dipoli/Lumituuli	ADM1: Conference opening Location: Dipoli/Lumituuli Prof. Mari Laakso Research Director, National Land Survey of Finland
9:30am - 10:15am Dipoli/Lumituuli	KEY1: Keynote: Prof. Grant McKenzie, McGill University, Montreal, Canada Location: Dipoli/Lumituuli Session Chair: Prof. Henrikki Tenkanen
10:15am - 10:30am Dipoli/Lumituuli	PCH: Showcase pitching Location: Dipoli/Lumituuli Session Chair: Dr. Pyry Kettunen
10:30am - 11:00am Dipoli/Käpyaula	COF2: Coffee break Location: Dipoli/Käpyaula
11:00am - 12:30pm Dipoli/Lumituuli	SES1: Session 1 - GeoAI and LBS Location: Dipoli/Lumituuli
12:30pm - 1:30pm Dipoli/Restaurant Metso	LCH1: Lunch break Location: Dipoli/Restaurant Metso
1:30pm - 3:00pm Dipoli/Lumituuli	SES2: Session 2 - GeoAI and LBS, continued Location: Dipoli/Lumituuli
3:00pm - 3:30pm Dipoli/Käpyaula	COF3: Coffee break Location: Dipoli/Käpyaula
3:30pm - 5:00pm Dipoli/Lumituuli	SES3: Session 3 - Visualisation, Mobile Cartography, and LBS Location: Dipoli/Lumituuli
6:00pm - 9:00pm Aalto/C130a Learning Hub Greenhouse	SOC1: Ice breaker Location: Aalto/C130a Learning Hub Greenhouse

Date: Thursday, 08/May/2025

9:00am - 9:45am Dipoli/Lumituuli	KEY2: Keynote: Prof. Anahid Basiri, University of Glasgow, UK Location: Dipoli/Lumituuli Session Chair: Prof. Juha Oksanen
9:45am - 10:45am Dipoli/Lumituuli	SES4: Session 4 - Place modelling and understanding Location: Dipoli/Lumituuli
10:45am - 11:15am Dipoli/Käpyaula	COF4: Coffee break Location: Dipoli/Käpyaula
11:15am - 12:30pm Dipoli/Lumituuli	SES5: Session 5 - Disruptions and security in LBS Location: Dipoli/Lumituuli
12:30pm - 1:30pm Dipoli/Restaurant Metso	LCH2: Lunch break Location: Dipoli/Restaurant Metso
1:30pm - 2:15pm Dipoli/Lumituuli	KEY3: Keynote: Mr. Antti Vuorela, Helsinki Region Transport (HSL), Finland Location: Dipoli/Lumituuli Session Chair: Dr. Pyry Kettunen
2:15pm - 3:15pm Dipoli/Lumituuli	SES6: Session 6 - Crowdsourcing and location privacy Location: Dipoli/Lumituuli
3:15pm - 3:45pm Dipoli/Käpyaula	COF5: Coffee break Location: Dipoli/Käpyaula
3:45pm - 5:00pm Dipoli/Lumituuli	SES7: Session 7 - Spatial data science and big data analytics Location: Dipoli/Lumituuli
6:30pm - 10:00pm Restaurant Hima & Sali	SOC2: Conference dinner Location: Restaurant Hima & Sali

Date: Friday, 09/May/2025

9:00am - 9:45am Dipoli/Lumituuli	KEY4: Keynote: Prof. Heidi Kuusniemi, University of Vaasa, Finland Location: Dipoli/Lumituuli Session Chair: Dr. Ville Mäkinen
9:45am - 10:45am Dipoli/Lumituuli	SES8: Session 8 - Spatial data science and big data analytics Location: Dipoli/Lumituuli
10:45am - 11:15am Dipoli/Käpyaula	COF6: Coffee break Location: Dipoli/Käpyaula
11:15am - 12:15pm Dipoli/Lumituuli	SES9: Session 9 - User experience and data-driven systems in LBS Location: Dipoli/Lumituuli

12:15pm - 12:30pm

Dipoli/Lumituuli

12:30pm - 1:30pm

Dipoli/Restaurant Metso

ADM2: Conference closing

Location: Dipoli/Lumituuli

Session Chair: **Prof. Juha Oksanen**

LCH3: Lunch break

Location: Dipoli/Restaurant Metso

Presentations

SES1: Session 1 - GeoAI and LBS

Time: Wednesday, 07/May/2025: 11:00am - 12:30pm · Location: Dipoli/Lumituuli

Maximum number of presentations for this session: 5

11:00am - 11:20am

Geospatial Data Quality in the Era of Generative AI: Can we Trust the Geographic Information Produced by Large Language Models?

Joseph William Shingleton^{1,2}, Ana Basiri^{1,2}

¹University of Glasgow, United Kingdom; ²Alan Turing Institute, United Kingdom

11:20am - 11:35am

Predicting Intra-City Mobility Flows without Using Historical Flow Data

Xucai Zhang, Haosheng Huang

GeoAI Research Center, Ghent University, Belgium

11:35am - 11:50am

Integrating Multi-Source Data to Construct Complete Pedestrian Networks

Yi-Wen Mo¹, Chiao-Ling Kuo^{1,2}

¹Center for GIS, Research Center for Humanities and Social Sciences, Academia Sinica; ²Department of Geography, National Taiwan University

11:50am - 12:05pm

Building a foundation model for urban planning with mobility data

Andrew Renninger

University College London, United Kingdom

12:05pm - 12:20pm

Enhancing Pedestrian Route Choice with LLaVA-Generated Descriptions

Si Ying Yau¹, Chiao-Ling Kuo^{1,2}

¹Department of Geography, National Taiwan University; ²Center for GIS, Research Center for Humanities and Social Sciences, Academia Sinica

SES2: Session 2 - GeoAI and LBS, continued

Time: Wednesday, 07/May/2025: 1:30pm - 3:00pm · Location: Dipoli/Lumituuli

Maximum number of presentations for this session: 5

1:30pm - 1:50pm

Advancing Vision-Language Models with Spatial-Context Prompt Tuning: A Case Study in GeoAI-Empowered Image Geo-Localization

Meiliu Wu^{1,2}, Qunying Huang², Song Gao²

¹School of Geographical and Earth Sciences, University of Glasgow, United Kingdom; ²Department of Geography, University of Wisconsin-Madison, United States

1:50pm - 2:10pm

Visual Localization Based on Data Augmentation and Structure Consistency

Zih-Ying Lee, Chia-Hao Tu, Eric Hsueh-Chan Lu

National Cheng Kung University, Taiwan

2:10pm - 2:25pm

Addressing Challenges in Textual Geolocation: Insights from Hebrew Place Descriptions

Sagi Dalyot¹, Tal Bauman¹, Tzuf Paz-Argaman², Itai Mondshine², Reut sarfaty², Itzhak Omer³

¹The Technion, Israel; ²Bar Ilan University, Israel; ³Tel Aviv University, Israel

2:25pm - 2:40pm

IoT-Based Dolphin Sound Detection System with GPS and Location-Based Services for Enhancing Marine Tourism

Kanchana Rathnayaka, Dushyanthi Udeshika Vidanagama

General Sir John Kotelawala Defence University, Sri Lanka

2:40pm - 2:55pm

Those holding the fort: The complexity of human mobility beyond traditional patterns

Roberto Murcio

Birkbeck, London University, United Kingdom

SES3: Session 3 - Visualisation, Mobile Cartography, and LBS

Time: Wednesday, 07/May/2025: 3:30pm - 5:00pm · *Location:* Dipoli/Lumituuli

Maximum number of presentations for this session: 5

3:30pm - 3:50pm

Enhancing Public Transport Information Visualization in Mobile Map Apps for Hikers

Michael Förster, Tomasch Reichenbacher

Department of Geography, University of Zurich, Switzerland

3:50pm - 4:10pm

Where Is My Recruit: Assessing Cartographic Proficiency Of Military Recruits Through Wearable Data Analytics

Robbe Decorte, Dajo Criel, Kenzo Milleville, Maarten Slembrouck, Steven Verstockt

IDLab, Ghent University—imec, Belgium

4:10pm - 4:25pm

Exploring Immersive Analytics for Spatiotemporal Patterns: A Case Study on Origin-Destination Data

Chenyu Zuo¹, Cheng Fu^{2,3}, Stefan Ivanovic¹, Fabian Brülisauer¹

¹ETH Zurich, Switzerland; ²University of Zurich; ³China Agricultural University, Beijing, China

4:25pm - 4:40pm

Systematic Analysis of Distance Learning in Higher Education Using Story Map

Gabriela Godišková^{1,2}, Zdeněk Stachoň^{1,2}, Anna Auermüllerová¹

¹Department of Geography, Faculty of Science, Masaryk University, Czech Republic; ²Department of Information and Library Studies, Faculty of Arts, Masaryk University, Czech Republic

4:40pm - 4:55pm

Analysing Student Projects in Mobile Cartography: Trends, User Expectations and Educational Insights

Eva Hauthal, Jakob Listabarth, Dirk Burghardt

Technische Universität Dresden, Germany

SES4: Session 4 - Place modelling and understanding

Time: Thursday, 08/May/2025: 9:45am - 10:45am · *Location:* Dipoli/Lumituuli

Maximum number of presentations for this session: 4

9:45am - 10:00am

Quantifying the role of nature in tourism at regional and global scales

Matti Hästbacka, Tatu Leppämäki, Tuuli Toivonen

University of Helsinki, Finland

10:00am - 10:15am

Comparing Habitants' and Visitors' Perceptions of Places via Social Media Reviews

Qingya Cheng, Rui Zhu, Richard Harris

University of Bristol, United Kingdom

10:15am - 10:30am

Place Modelling by Clustering Foursquare POIs in a Place2Vec-Based Approach

Leyi Xu

University of Helsinki, Finland

10:30am - 10:45am

Relaxation and Attention: The Impacts of Place on Brain Activity Captured by EEG

Jiaxin Feng

Dartmouth College, United States of America

SES5: Session 5 - Disruptions and security in LBS

Time: Thursday, 08/May/2025: 11:15am - 12:30pm · *Location:* Dipoli/Lumituuli

Maximum number of presentations for this session: 4

11:15am - 11:35am

Effects of prolonged GNSS jamming on a continuously operating monitoring station

Mika Saajasto¹, M. Zahidul H. Bhuiyan¹, Topi Rikkinen², Simo Marila², Sanna Kaasalainen¹

¹Finnish Geospatial Research Institute, Finland; ²National Land Survey, Finland

11:35am - 11:50am

Piloting Status of the Location-enabled LEDSOL Solution for Access to Clean Water in Africa

Elena Simona Lohan¹, Oana Cramariuc², Tomkouani Kodom³, Hafida Lebik⁴, Kathrin Bierwirth⁵

¹Tampere University, Finland; ²Centrul IT Pentru Stiinta si Tehnologie, Bucharest, Romania; ³Laboratory of Applied Hydrology and Environment, University of Lome, Togo; ⁴UDES/EPST–Centre de Developpement des Energies Renouvelables, Tipaza, Algeria;

⁵Institut fur Sozialforschung und Sozialwirtschaft (iso) e.V., Saarbrücken, Germany

11:50am - 12:05pm

Efficient Navigation for Parcel Delivery

Toshihiro Osaragi, Yuya Taguchi

Institute of Science Tokyo, Japan

12:05pm - 12:25pm

ICA Commission on Location Based Services (LBS); ICA Commission on Cognitive Issues in Geographic Information Visualization; ICA Commission on Digital Transformation of National Mapping Agencies

Jukka M. Krisp

University Augsburg, Germany

SES6: Session 6 - Crowdsourcing and location privacy

Time: Thursday, 08/May/2025: 2:15pm - 3:15pm · *Location:* Dipoli/Lumituuli

Maximum number of presentations for this session: 4

2:15pm - 2:30pm

IOT based Elephant Detection and Railway Collision Prevention System with GPS based Localization

Vinodi Kasthuri, Dushyanthi Udeshika Vidanagama

General Sir John Kotelawala Defence University, Sri Lanka

2:30pm - 2:45pm

Making Cultural Ecosystem Services Truly Cultural: Mapping Outdoor Experiences in Ukraine with Telegram

Oleksandr Karasov¹, Tiina Rinne², Olle Järv³, Henrikki Tenkanen¹

¹GIST Lab, Department of Built Environment, Aalto University, Finland; ²Transport Research Center Verne, Tampere University, Finland; ³Digital Geography Lab, Department of Geosciences and Geography, University of Helsinki, Finland

2:45pm - 3:00pm

Rethinking Public Participation: Including Individuals with Intellectual Disabilities

Carsten Keßler, Christian Danowski-Bühren

Bochum University of Applied Sciences, Germany

3:00pm - 3:15pm

Geoprivacy Open Data – A New FAIR Personal-Level Mobility Dataset for Research and Innovation

Juha Oksanen¹, Anna Brauer², Ville Mäkinen¹

¹Finnish Geospatial Research Institute, National Land Survey of Finland, Finland; ²Chair of Geoinformatics, Dresden University of Technology, Germany

SES7: Session 7 - Spatial data science and big data analytics

Time: Thursday, 08/May/2025: 3:45pm - 5:00pm · Location: Dipoli/Lumituuli

Maximum number of presentations for this session: 5

3:45pm - 4:00pm

Why Understanding the Big Data We Use for Research Matters – a Global Analysis of Flickr

Tatu Leppämäki¹, Vuokko Heikinheimo¹, Johanna Eklund¹, Anna Hausmann^{1,2}, Tuuli Toivonen¹

¹Digital Geography Lab, Department of Geosciences and Geography, University of Helsinki, Finland; ²Department of Biological and Environmental Science, School of Resource Wisdom, University of Jyväskylä, Finland

4:00pm - 4:15pm

Rainfall-Integrated Traffic Flow Prediction Using Machine Learning Techniques

Supuni Nissanka¹, Guenther Retscher²

¹Department of Town and Country Planning, University of Moratuwa, Sri Lanka; ²TU Wien - Vienna University of Technology, Department of Geodesy and Geoinformation, Austria

4:15pm - 4:30pm

Experienced Social Segregation in Fifteen Minute Cities: A Data and Modeling Approach

Davi Gressler¹, Hugo Barbosa²

¹University of São Paulo; ²University of Exeter, Computer Science Department

4:30pm - 4:45pm

Comparative Modelling of Cycling Route Choice by Bikes and E-Bikes: The Case Study of Tartu, Estonia

Martin Haamer¹, Mirosława Lukawska², Jacek Pawlak³, Age Poom¹, Anto Aasa¹, Aruna Sivakumar³

¹University of Tartu, Estonia; ²Technische Universität Dresden, Germany; ³Imperial College London, United Kingdom

4:45pm - 5:00pm

Exploring the regional changes in the structure of student mobility in Europe: before and after Covid-19

Tuomas Väisänen¹, Milad Malekzadeh¹, Oula Inkeröinen^{1,2}, Olle Järv¹

¹University of Helsinki, Finland; ²Statistics Finland, Finland

SES8: Session 8 - Spatial data science and big data analytics

Time: Friday, 09/May/2025: 9:45am - 10:45am · *Location:* Dipoli/Lumituuli

Maximum number of presentations for this session: 4

9:45am - 10:00am

A pan-European analysis on exposure to greenery during active travel – insights from using open mobility data

Robert Klein, Elias Willberg, Silviya Korpilo, Tuuli Toivonen

University of Helsinki, Finland

10:00am - 10:15am

Measuring Regional Attractiveness in Europe Through Regional Mobility Patterns Using Big Data

Milad Malekzadeh, Tuomas Väisänen, Olle Järv

Digital Geography Lab, Department of Geosciences and Geography, University of Helsinki, Finland

10:15am - 10:30am

Urban Block Carbon Emission Prediction with Building Environment Factors

Juliette Bricker¹, Nadia Reggel¹, Nils Voß¹, Dushyanthi Udeshika Vidanagama², Retscher Guenther¹

¹Technische Universität Wien: Wien, Wien, AT; ²General Sir John Kotelawala Defence University, Sri Lanka

10:30am - 10:45am

Identification of Urban Areas using Machine Learning

Pia Wolfram¹, Katrin Bogner¹, Jakob Bösch¹, Dushyanthi Udeshika Vidanagama², Retscher Günther¹

¹Technische Universität Wien: Wien, Wien, AT; ²General Sir John Kotelawala Defence University, Sri Lanka

SES9: Session 9 - User experience and data-driven systems in LBS

Time: Friday, 09/May/2025: 11:15am - 12:15pm · *Location:* Dipoli/Lumituuli

Maximum number of presentations for this session: 4

11:15am - 11:30am

Extending the Cartography Classroom with LBS: the Design, Implementation, and Preliminary Evaluation of a Guided Tour Educational Module.

Gareth Baldrice-Franklin

University of Wisconsin—Madison, United States of America

11:30am - 11:45am

Locative Audio Technology for Exploring Green Stormwater Infrastructure: A Preliminary Study

Nuzhat T. Nawshin¹, Robert E. Roth¹, Annika Anderson¹, Gareth Baldrice-Franklin¹, R. Justin Hougham³, David A. Hart²

¹University of Wisconsin-Madison, USA; ²University of Wisconsin Sea Grant Institute, USA; ³Division of Extension, University of Wisconsin-Madison, USA

11:45am - 12:00pm

Implementing Evidence Based Navigation Systems in Medical Buildings

Kateřina Jochecová, Ondřej Kvarda, Gabriela Godišková, Ladislava Zbiejczuk Suchá

Department of Information and Library Studies, Faculty of Arts, Masaryk University, Czech Republic

12:00pm - 12:15pm

Data-Driven and Evidence-Based Computing Algorithms to Detect Anomalies of Cycling Facilities

Kewei Ren, Chun-Hsing Ho

University of Nebraska-Lincoln, United States of America