

## Date: Wednesday, 07/May/2025

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

## Date: Thursday, 08/May/2025

9:00am - 9:45am Dipoli/Lumituuli	<b>KEY2: Keynote</b> Location: <b>Dipoli/Lumituuli</b> Session Chair: <b>Juha Oksanen</b>
9:45am - 10:45am Dipoli/Lumituuli	<b>SES4: Session 4 - Place modelling and understanding</b> Location: <b>Dipoli/Lumituuli</b>
10:45am - 11:15am Dipoli/Käpyaula	<b>COF4: Coffee break</b> Location: <b>Dipoli/Käpyaula</b>
11:15am - 12:30pm Dipoli/Lumituuli	<b>SES5: Session 5 - Disruptions and security in LBS</b> Location: <b>Dipoli/Lumituuli</b>
12:30pm - 1:30pm Dipoli/Restaurant Metso	<b>LCH2: Lunch break</b> Location: <b>Dipoli/Restaurant Metso</b>
1:30pm - 2:15pm Dipoli/Lumituuli	<b>KEY3: Keynote</b> Location: <b>Dipoli/Lumituuli</b> Session Chair: <b>Pyy Kettunen</b>
2:15pm - 3:15pm Dipoli/Lumituuli	<b>SES6: Session 6 - Crowdsourcing and location privacy</b> Location: <b>Dipoli/Lumituuli</b>
3:15pm - 3:45pm Dipoli/Käpyaula	<b>COF5: Coffee break</b> Location: <b>Dipoli/Käpyaula</b>
3:45pm - 5:00pm Dipoli/Lumituuli	<b>SES7: Session 7 - Spatial data science and big data analytics</b> Location: <b>Dipoli/Lumituuli</b>
6:30pm - 10:00pm Restaurant Hima & Sali	<b>SOC2: Conference dinner</b> Location: <b>Restaurant Hima &amp; Sali</b>

## Date: Friday, 09/May/2025

9:00am - 9:45am Dipoli/Lumituuli	<b>KEY4: Keynote</b> Location: <b>Dipoli/Lumituuli</b> Session Chair: <b>Ville Mäkinen</b>
9:45am - 10:45am Dipoli/Lumituuli	<b>SES8: Session 8 - Spatial data science and big data analytics</b> Location: <b>Dipoli/Lumituuli</b>
10:45am - 11:15am Dipoli/Käpyaula	<b>COF6: Coffee break</b> Location: <b>Dipoli/Käpyaula</b>
11:15am - 12:15pm Dipoli/Lumituuli	<b>SES9: Session 9 - User experience and data-driven systems in LBS</b> Location: <b>Dipoli/Lumituuli</b>

12:15pm - 12:30pm

Dipoli/Lumituuli

12:30pm - 1:30pm

Dipoli/Restaurant Metso

**ADM2: Conference closing**

Location: Dipoli/Lumituuli

Session Chair: 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<sup>1,2</sup>, Ana Basiri<sup>1,2</sup>

<sup>1</sup>University of Glasgow, United Kingdom; <sup>2</sup>Alan 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 Mo<sup>1</sup>, Chiao-Ling Kuo<sup>1,2</sup>

<sup>1</sup>Center for GIS, Research Center for Humanities and Social Sciences, Academia Sinica; <sup>2</sup>Department 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 Yau<sup>1</sup>, Chiao-Ling Kuo<sup>1,2</sup>

<sup>1</sup>Department of Geography, National Taiwan University; <sup>2</sup>Center 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<sup>1,2</sup>, Qunying Huang<sup>2</sup>, Song Gao<sup>2</sup>

<sup>1</sup>School of Geographical and Earth Sciences, University of Glasgow, United Kingdom; <sup>2</sup>Department 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 Dalyot<sup>1</sup>, Tal Bauman<sup>1</sup>, Tzuf Paz-Argaman<sup>2</sup>, Itai Mondshine<sup>2</sup>, Reut sarfaty<sup>2</sup>, Itzhak Omer<sup>3</sup>

<sup>1</sup>The Technion, Israel; <sup>2</sup>Bar Ilan University, Israel; <sup>3</sup>Tel 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 Zuo<sup>1</sup>, Cheng Fu<sup>2,3</sup>, Stefan Ivanovic<sup>1</sup>, Fabian Brülisauer<sup>1</sup>

<sup>1</sup>ETH Zurich, Switzerland; <sup>2</sup>University of Zurich; <sup>3</sup>China Agricultural University, Beijing, China

4:25pm - 4:40pm

### Systematic Analysis of Distance Learning in Higher Education Using Story Map

Gabriela Godišková<sup>1,2</sup>, Zdeněk Stachoň<sup>1,2</sup>, Anna Auermüllerová<sup>1</sup>

<sup>1</sup>Department of Geography, Faculty of Science, Masaryk University, Czech Republic; <sup>2</sup>Department 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 Saajasto<sup>1</sup>, M. Zahidul H. Bhuiyan<sup>1</sup>, Topi Rikkinen<sup>2</sup>, Simo Marila<sup>2</sup>, Sanna Kaasalainen<sup>1</sup>**

<sup>1</sup>Finnish Geospatial Research Institute, Finland; <sup>2</sup>National Land Survey, Finland

**11:35am - 11:50am**

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

**Elena Simona Lohan<sup>1</sup>, Oana Cramariuc<sup>2</sup>, Tomkouani Kodom<sup>3</sup>, Hafida Lebig<sup>4</sup>, Kathrin Bierwirth<sup>5</sup>**

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

<sup>5</sup>Institut für 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 Udesika 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 Karasov<sup>1</sup>, Tiina Rinne<sup>2</sup>, Olle Järv<sup>3</sup>, Henrikki Tenkanen<sup>1</sup>**

<sup>1</sup>GIST Lab, Department of Built Environment, Aalto University, Finland; <sup>2</sup>Transport Research Center Verne, Tampere University, Finland; <sup>3</sup>Digital 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 Oksanen<sup>1</sup>, Anna Brauer<sup>2</sup>, Ville Mäkinen<sup>1</sup>**

<sup>1</sup>Finnish Geospatial Research Institute, National Land Survey of Finland, Finland; <sup>2</sup>Chair 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 Leppämäki<sup>1</sup>, Vuokko Heikinheimo<sup>1</sup>, Johanna Eklund<sup>1</sup>, Anna Hausmann<sup>1,2</sup>, Tuuli Toivonen<sup>1</sup>

<sup>1</sup>Digital Geography Lab, Department of Geosciences and Geography, University of Helsinki, Finland; <sup>2</sup>Department 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 Nissanka<sup>1</sup>, Guenther Retscher<sup>2</sup>

<sup>1</sup>Department of Town and Country Planning, University of Moratuwa, Sri Lanka; <sup>2</sup>TU 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 Gressler<sup>1</sup>, Hugo Barbosa<sup>2</sup>

<sup>1</sup>University of São Paulo; <sup>2</sup>University 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 Haamer<sup>1</sup>, Mirosława Lukawska<sup>2</sup>, Jacek Pawlak<sup>3</sup>, Age Poom<sup>1</sup>, Anto Aasa<sup>1</sup>, Aruna Sivakumar<sup>3</sup>

<sup>1</sup>University of Tartu, Estonia; <sup>2</sup>Technische Universität Dresden, Germany; <sup>3</sup>Imperial College London, United Kingdom  
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4:45pm - 5:00pm

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

Tuomas Väisänen<sup>1</sup>, Milad Malekzadeh<sup>1</sup>, Oula Inkeröinen<sup>1,2</sup>, Olle Järv<sup>1</sup>

<sup>1</sup>University of Helsinki, Finland; <sup>2</sup>Statistics 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 Bricker<sup>1</sup>, Nadia Reggel<sup>1</sup>, Nils Voß<sup>1</sup>, Dushyanthi Udeshika Vidanagama<sup>2</sup>, Retscher Guenther<sup>1</sup>**

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

10:30am - 10:45am

**Identification of Urban Areas using Machine Learning**

**Pia Wolfram<sup>1</sup>, Katrin Bogner<sup>1</sup>, Jakob Bösch<sup>1</sup>, Dushyanthi Udeshika Vidanagama<sup>2</sup>, Retscher Günther<sup>1</sup>**

<sup>1</sup>Technische Universität Wien: Wien, Wien, AT; <sup>2</sup>General 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. Nawshin<sup>1</sup>, Robert E. Roth<sup>1</sup>, Annika Anderson<sup>1</sup>, Gareth Baldrice-Franklin<sup>1</sup>, R. Justin Hougham<sup>3</sup>, David A. Hart<sup>2</sup>**

<sup>1</sup>University of Wisconsin-Madison, USA; <sup>2</sup>University of Wisconsin Sea Grant Institute, USA; <sup>3</sup>Division 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 Zbieczuk 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 \_\_\_\_\_