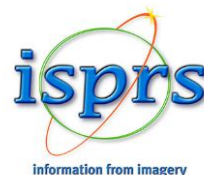
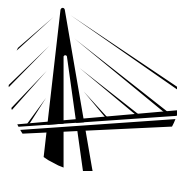


BUDAPEST GEOSUMMIT 2025

Advancing Geospatial
Science and Engineering

BME MAIN BUILDING,
BUILDING K
MEZZANINE, ROOM 26.

12-13 MAY
2025



Agenda – Day 1

- 9:00 – 9:30** **Registration – Morning Coffee**
- 9:30 – 10:00** **Welcome and Introduction**
Szabolcs Rózsa, Dean of the Civil Engineering Faculty, BME
Charles K. Toth, Research Professor, The Ohio State University, Dpt. Of Civil, Environmental and Geodetic Engineering
Lena Halounová, president of ISPRS, Czech Technical University
Opening of the conference
- 10:00 – 10:40** **Session 1 - Tamás Lovas**
Árpád Barsi – research activities of the BME Department of Photogrammetry and Geoinformatics
Szabolcs Rózsa – research activities of the BME Department of Geodesy and Surveying
- 10:40 – 11:00** **Coffee Break**
- 11:00 – 12:30** **Session 2 - Charles K. Toth**
Christian Heipke - AI in Photogrammetry and Remote Sensing
Uwe Soergel - Paid Crowdsourcing in Remote Sensing: Applications and Quality Control
Nicolas Paparoditis - National Mapping Programs
- 12:30 – 14:00** **Lunch Break at BME**
- 14:00 – 15:15** **Session 3 – Christian Heipke**
Daniela Poli - Airborne Mapping: Overview
Csaba Benedek - Urban scene perception and environment model synthesis from multisensorial spatial data
Monica Sester - Sustainable urban mobility
- 15:15 – 15:30** **Coffee Break**
- 15:30 – 17:00** **Session 4 - Zsófia Kugler**
Nurlan Aliyev - Integration of NLP in the architectural design process of floorplans
Mohamed Fawzy - How Remote Sensing Data Enriches the Urban Development Based on AI Strategies: Insights on Image Datasets, Techniques, and Applications
Zoltán Nagy - Visual programming and parametric tools in point cloud processing
Mohammad Dowajy - AI-Based Segmentation of Road Surface Points from 3D Point Cloud Data
Márk Barta - A Trade-Off Analysis of Point Cloud Density for Real-Time 3D Semantic Segmentation
Viktor G. Horváth - Investigating the accuracy of Google's Visual Positioning System

Agenda – Day 2

- 09:00 – 09:30** **RoboDog Demo**
Evosoft Hungary
- 09:30 – 10:45** **Session 5 – Charles K. Toth**
Fabio Remondino - Giving a Meaning to 3D Point Clouds
Norbert Haala - SLAM-based Mapping of Complex Indoor Environments
Dorota Iwaszczuk - AI-based Extraction of Urban Objects from Images and 3D Point Clouds
- 10:45 – 11:00** **Coffee Break**
- 11:00 – 12:30** **Session 6 – Charles K. Toth**
Peter Teunissen - Carrier-Phase GNSS Pose Estimation: From RTK to Array PPP-RTK
Panel Discussion
- 12:30 – 14:00** **Lunch Break at BME**
- 14:00 – 15:00** **Mixed Reality Demo / Drone Development Demo –**
BME / VTR Drones
- 15:00 – 15:30** **Coffee Break**
- 15:30 – 17:00** **Session 8 – Szabolcs Rózsa**
Bence Ambrus - Detecting Ground Deformation from Induced Seismicity Using Joint GNSS and InSAR Measurements
Enikő Barbély - Epicentre determination using tiltmeter data from the Mur-Mürz Monitoring Network
Bence P. Hrutka - Route planning of autonomous off-road vehicles
Shwana Manguri - Determining the Actual Shape of a Bridge Pylon with Cylindrical and Conical Shapes Using Point Cloud Data and the RANSAC Shape Fitting Method.
Bálint Magyar - Interactive demonstration of InSAR.Hungary application
Closing Remarks - Tamás Lovas, Charles K. Toth

Additional Information

Conference Information

www.geosummit2025.bme.hu

Main building of BME

[YouTube video about the main building](#)

Address:

[BME Központi épület, Budapest, Műgyetem rkp. 3, 1111](#)

Information about the university

[BME-Brochure-2023](#)

What to visit while you are here

<https://xplore.bme.hu/explore-budapest/>

Information about the location

<https://xplore.bme.hu/location/>

Recommended hotels

Ibis Budapest Centrum Hotel

<https://ibis-budapest-centrum.h-rez.com/>

Mercure Hotel Castle Hill

<https://mercurecastlehill.hu-budapest.com/en/>

Mercure Hotel Korona

<https://mercurekorona.hu-budapest.com/en/>

Ibis Styles Hotel

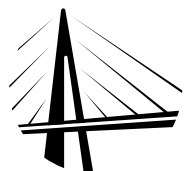
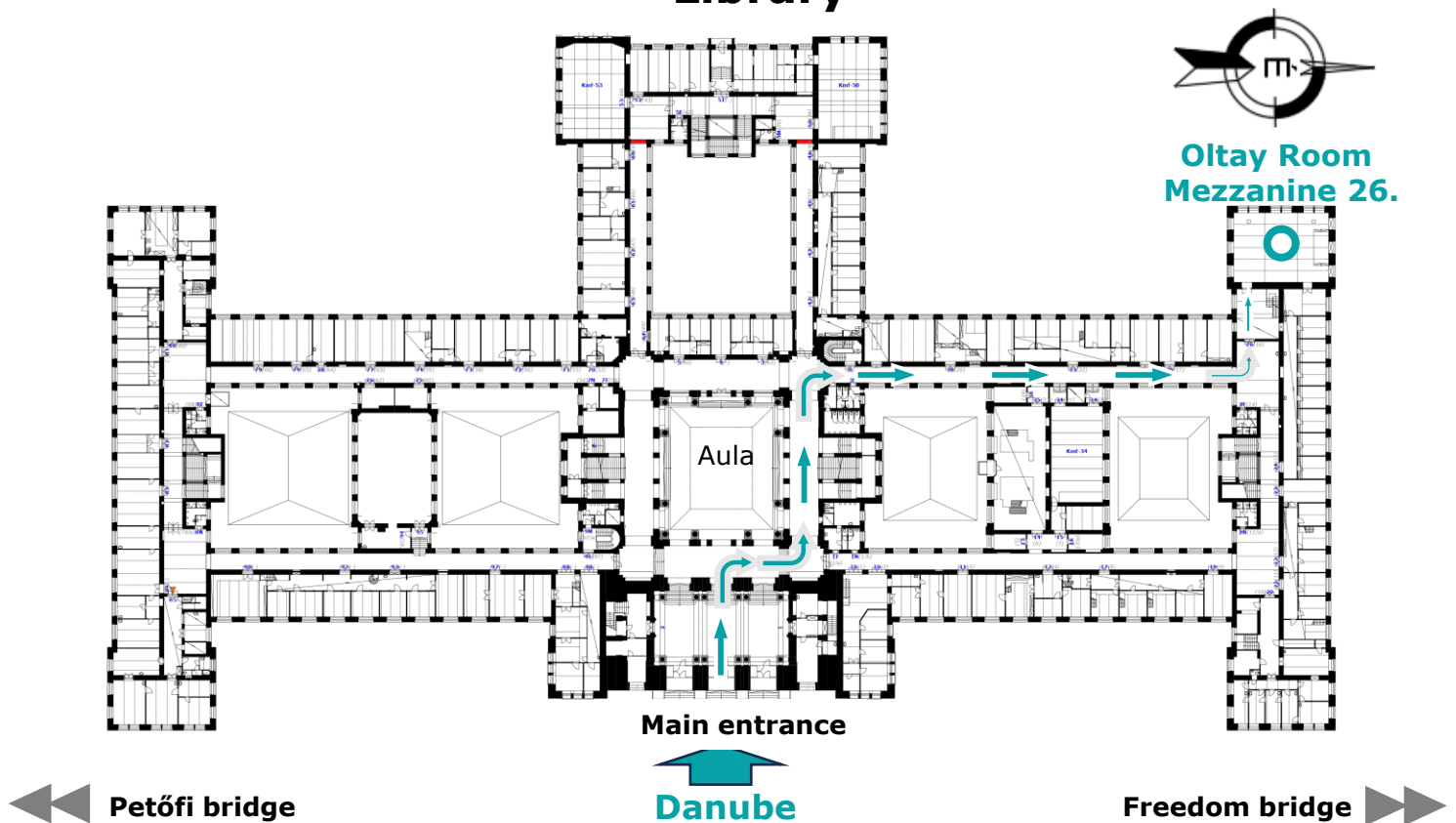
<https://ibisstyles-budapestcity.com/>



Additional Information Map to the conference room



BME, Building K Mezzanine Library

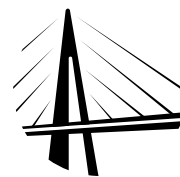


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