The 28th AGILE Conference "Geographic Information Science responding to Global Challenges", Dresden, Germany, 10-13 June 2025

Last update: June 04, 2025.

10 June Tuesday	11 June Wednesday	12 June Thursday	13 June Friday
8:30 – 15:00 Registration			8:30 – 9:30 **S9 Keynote:** Ralf Seppelt
9:00 – 11:00 **Workshops** W1, W4, T1, T2, T3	9:00 – 9:30 Welcome	9:00 – 10:00 **S5 Keynote:** Hilary Hanahoe	
	9:30 – 10:30 **S1 Keynote:** Dirk Brockmann		
11:00 – 11:30 Coffee/Snack Break	10:30 – 11:00 Coffee/Snack Break	10:00 – 10:30 Coffee/Snack Break	09:30 – 10:00 Coffee/Snack Break
11:30 – 13:00 **Workshops** W1, W4, T1, T2, T3	11:00 – 12:30 **S2** S2a, S2b, S2c	10:30 – 12:00 **S6** S6a, S6b	10:00 – 13:00 **S10** Best Paper Session & Closing
13:00 – 14:00 Lunch	12:30 – 13:30 Lunch	12:00 – 13:00 Lunch	13:00 – 14:00 Lunch
14:00 – 16:00 **Workshops** W1, W2, W3, T4	13:30 – 15:00 **S3** S3a, S3b, S3c	13:00 – 14:00 **S7** Plenary AGILE Annual Assembly	End of Conference
		14:00 – 15:30 **S8** S8a, S8b	
16:00 – 16:30 Coffee/Snack Break	15:00 – 15:30 Coffee/Snack Break		
16:30 – 18:00 **Workshops** W1, W2, W3, T4	15:30 – 17:00 **S4** S4a, S4b, S4c	15:30 – 16:00 Coffee/Snack Break	
	17:00 – 17:30 Poster Lightning Talks 17:30 – 18:00 Poster Session	16:00 – 17:30 Poster Session continued	
End of sessions			
19:00 – 23:00 Icebreaker Reception (Sponsored by ESRI)	19:00 – 20:30 Guided tour through the Dresden City Centre	19:00 – 23:00 Conference Dinner	

Full papers: 20 min. for presentation + 10 min. for questions | **Short papers**: 15 min. for presentation + 5 min. for questions | **Journal articles**: 10 min. for presentation + 5 min. for questions

Plan of the German Hygiene Museum: click here.

Detailed Programme

Day 1: Tuesday 10 June ([Workshops and Tutorials](#))
08:00-15:00 Registration
09:00-13:00 Morning Sessions

- **W1** Walking the X-min city: Methods and implementations to assess walkability and pedestrian accessibility (*Eva Nuhn*)
- **W4** Geo xR - Addressing planetary and societal challenges by integrating geospatial data science with spatial media (*Alexander Klippel*)
- ~~**T1**Open and reproducible research best practices: Codechecks, AGILE repro reviews, and reprohacks for your research (*Frank Ostermann*)~~ [Cancelled]
- **T2** Large Language Models for Conversational Geodata Search (*Simeon Wetzel*)
- **T3** Education Connections for Tomorrow – Matching educational offers and demand with the GEO Body of Knowledge (*Rob Lemmens*)

13:00-14:00 Lunch
14:00-18:00 Afternoon Sessions

- **W1 (continued)** Walking the X-min city: Methods and implementations to assess walkability and pedestrian accessibility (*Eva Nuhn*)
- **W2** 2nd Workshop on CartoAI: AI for Cartography (*Yu Feng*)
- **W3** Geospatial Data Management – challenges and good practices (*Evelyn Uuemaa*)
- **T4** State of the art in Esri's AI solutions (*Mike Gould*)

[Icebreaker Reception](#) (Sponsored by ESRI) @Lohrmanns Brew

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Day 2: Wednesday 11 June
Registration (08:00-15:00) @Galerie
Welcome (09:00-09:30) @Grosser Saal
Opening speech (*Lars Bernard*)
S1 [Keynote](#) (09:30-10:30) (Session Chair: Lars Bernard) @Grosser Saal
Complexity, Networks and Infectious Disease Dynamics (*Dirk Brockmann*)
Coffee/Snack break (10:30-11:00) @Wandelhalle
S2 Paper sessions (11:00-12:30)
S2a: Urban Mobility I (Session Chair: Martin Raubal) @Grosser Saal

- Measuring Landmark Salience in Rural Areas: A Comparative Study of Two Models (Full Paper) (*Eva Nuhn, Michaela Ehrig, Leonie Engemann, Fabian Heißerer, Julia Maltan, Jenny Ruf and Sabine Timpf*)
- Evaluating built environment factors as determinants of public transport mode shares in Uyo urban area, Nigeria (Full Paper) (*Patrick Akpan and Eduma Essien*)
- Are routes aligned with the street network less complex? A comprehensive analysis (*Arvid Horned, Zoe Falomir and Kai-Florian Richter*)

- The positive effect of blue luminescent pathways on urban park visitor's affective states: A virtual reality online study measuring facial expressions and self-reports (Journal Article) (*Sara Lanini-Maggi, Martin Lanz, Christopher Hilton and Sara Irina Fabrikant*)

S2b: Spatial Analysis I (Session Chair: Alex Comber) @Kleiner Saal

- Spatial Distribution of Feasible Solutions for Service Facility Location Problems under Uncertainty (Full Paper) (*Toshihiro Osaragi and Akira Mesaki*)
- Uncovering Regional Structures and Collaboration Hubs in Baden-Württemberg through Clustering a Company Hyperlink Network (*Umut Nefta Kanilmaz, Thomas Schneidergruber, Sebastian Schmidt, Robert Dehghan and Johannes Scholz*)
- Analysing a Multi-Criteria Analysis to Prioritise Munition Piles in the German Baltic Sea for Remediation (*Alexander Pilz, Torsten Frey and Edzer Pebesma*)
- Mapping the geography of violence against children in Namibia: A Geographically Weighted Regression Approach (*Tobias Willem Shinyemba, Shino Shiode and Karen Devries*)

S2c: User-Generated Content and Citizen Science (Session Chair: Marco Painho) @Hörsaal

- Exploring Urban Place Function through User-Generated Textual Content (Full Paper) (*Shahreen Muntaha Nawfee, Stef De Sabbata and Nicholas J. Tate*)
- AI4WildLIVE: Integrating Biodiversity Monitoring and Earth Observation (*Jonas Grieb, Claus Weiland, Alexander Wolodkin, Daniel Bauer, Maya Beukes, Matthias Biber, Martin Jansen and Karsten Wesche*)
- Reviewing 10 years of openSenseMap - the open environmental data platform for (GI)Science, Education and Participation (*Frederick Bruch, Thomas Bartoschek, Benjamin Karic, Mario Pesch, Angela Schwering and Matthias Pfeil*)
- Evaluating the role of human and environmental factors causing the distribution of invasive plant species in the cantons of Vaud and Neuchâtel in Switzerland (*Maryam Lotfian, Simon Walther, Magali Egger, Olivier D'Ancona, Andres Perez-Uribe and Jens Ingensand*)

Lunch @Wandelhalle
S3 Paper sessions (13:30-15:00)
S3a: GeoAI (Session Chair: Simon Scheider) @Grosser Saal

- Investigating Moran's I Properties for Spatial Machine Learning: A Preliminary Analysis (*Jakub Nowosadand Hanna Meyer*)
- Leveraging LLMs and attention-mechanism for automatic annotation of historical maps (*Yunshuang Yuan and Monika Sester*)
- Interactive web-based Geospatial eXplainable Artificial Intelligence for AI model output exploration (*Qasem Safariallahkheili, Jochen Schiewe and Sebastian Meier*)
- SpaGAN: A spatially-aware generative adversarial network for building generalization in image maps (Journal Article) (*Zhiyong Zhou, Cheng Fu and Robert Weibel*)
- Spatial machine learning for exploring the variability in low height-for-age from socioeconomic, agroecological, and climate features in the Northern Province of

Rwanda (Journal Article) (*Gilbert Nduwayezu, Pengxiang Zhao, Rachid Oucheikh and Ali Mansourian*)

S3b: Urban Analytics I (Session Chair: Weiming Huang) @Kleiner Saal

- Beyond Walking and Biking: Expanding the 15-Minute City Area through Public Transport (Full Paper) (*Manuela Canestrini andIoannis Giannopoulos*)
- Mobility Vitality in Active and Micro-Mobility Modes: Measuring Urban Vitality Through Spatiotemporal Similarity (Full Paper) (*Dan Qiang and Grant McKenzie*)
- Rethinking Bikeability Indexes: Fusing Knowledge Graph and MCDA Technique for Multi-criteria Bike Network Evaluations (*Ayda Grisiute and Martin Raubal*)
- Associations between sense of place and the geometric shape complexity of corresponding self-reported spatial footprints from Lisbon, Portugal (Journal Article) (*René Westerholt and Albert Acedo*)

S3c: Geographic Knowledge Discovery (Session Chair: Carsten Keßler) @Hörsaal

- Mining Meaningful Facets in Spatiotemporal Information Retrieval with Spatial Relevance Feedback (Full Paper) (*Martin Werner*)
- Making Geospatial Data Offerings Discoverable and Accessible in the Green Deal Data Space (*Joan Maso,Alba Brobia, Raul Palma, Ignacio Elicegui, Daniel Parkhanovich, Lucy Bastin and Victoria Lush*)
- Knowledge extraction and footprint generation using the GEO Body of Knowledge (*Rob Lemmens, Sven Casteleyn, Upeksha Indeewari Edirisooriya Kirihami Vidanelage, Mark van Vliet, Carlos Granell and Stanislav Ronzhin*)
- MAP-VERSE: MAP Usability - Validated Empirical Research by Systematic Evaluation (*Merve Keskin,Tong Qin,Bing He,Vassilios Krassanakis and Florian Ledermann*)

Coffee/Snack break@Wandelhalle

S4 Paper sessions (15:30-17:00)

S4a: Cartographic Communication (Session Chair: Sara Irina Fabrikant) @Grosser Saal

- An Efficient System for Automatic Map Storytelling: A Case Study on Historical Maps (Full Paper) (*Ziyi Liu, Claudio Affolter, Sidi Wu, Yizi Chen and Lorenz Hurni*)
- Why Maps are More Favored Visuals in Climate Change Newsfeeds on Social Media? Exploring the Influence of User Characteristics (*Nianhua Liu, Yu Feng and Liqiu Meng*)
- Exploring the Landscapes of Literary Works: Stories, Data Models and Maps (*Giedrė Beconytė and Inga Vidugirytė*)
- Exploring the presence and persistence of cartographic anchors in pan-scalar maps (Journal Article) (*Maieul Gruget, Guillaume Touya and Ian Muehlenhaus*)

S4b: Disaster and Risk Management (Session Chair: Toshihiro Osaragi) @Kleiner Saal

- Centrality and Resilience in the Face of Flooding: A Case Study of Rio Grande do Sul (Full Paper) (*Ricardo Ruiz Sánchez, Marcel Reinmuth, Cristian Albornoz, Sven Lautenbach and Alexander Zipf*)

- Citizen-generated data, a climate adaptation complement: A case study in Brazil (*Manuella Comerio de Paulo, Diego Pajarito Grajales and João Porto de Albuquerque*)
- Do green roofs and spatial resolution influence flood simulation output? – A case study in Malmö, Southern Sweden (*Karolina Pantazatou, Andreas Persson, Per-Ola Olsson and Lars Harrie*)
- Leveraging YouTube as a Data Source for Crisis Management: A Case Study of the 2021 Southern Moravia Tornado (Journal Article) (*Lukáš Herman, Jiří Hladík, Dajana Snopková and Milan Konečný*)

S4c: Spatial Data Management (Session Chair: Monika Sester) @Hörsaal

- Point Cloud Data Management for Analytics in a Lakehouse (*Balthasar Teuscher and Martin Werner*)
- Identification and Visualization of Unscanned Areas Within a Building Based on the Building's Outer Hull (*Georgios Iliopoulos, Robert Voûte and Peter van Oosterom*)
- Implementation of Database-Supported Analysis for Spatio-Temporal Digital Terrain Models (*Ruiqi Liu, Paul Kuper and Martin Breunig*)
- LAND IT: A Decision Support System for Optimising Land Use Planning Strategies (*Márcia B. Matias, Cristina D. Henriques, Carlos Viegas Damásio, Fernando Birra and João Moura Pires*)

Poster Lightning Talks (17:00-17:30) (Session Chair: Auriol Degbelo) @Grosser Saal
Poster Session (17:30-18:00) @Galerie
[Social Activity (Guided tour through the Dresden City Centre)](#) (19:00-20:30)

Day 3: Thursday 12 June
Registration (08:00-15:00)

S5 [Keynote](#) (09:00-10:00) (Session Chair: Juha Oksanen) @Grosser Saal
No Data, No Party: the importance of responsibly shared, well managed data in a global digital era (*Hilary Hanahoe*)
Coffee/Snack break (10:00-10:30) @Wandelhalle
S6 Paper sessions (10:30-12:00)
S6a: Geodata Modelling and Geoinformation Services (Session Chair: Daniel Nüst) @Grosser Saal

- IGEO7: A new hierarchically indexed hexagonal equal-area discrete global grid system (*Alexander Kmoch, Kevin Sahr, Wai Tik Chan and Evelyn Uuemaa*)
- Experiments on Geospatial Data Modelling for Long-Term Trajectory Prediction of Aircrafts (*Natália Soares, Paul Walther and Martin Werner*)
- 3D Gaussian Splatting for Modern Architectural Heritage: Integrating UAV-Based Data Acquisition and Advanced Photorealistic 3D Techniques (*Yingwen Yu, Edward Verbree, Peter van Oosterom and Uta Pottgiesser*)
- What densities? Using density metrics for creating meaning in politics and planning action (*Caspar Kleiner, Denis Reiter and Mathias Jehling*)

- HTile: A high-performance real-time raster tile service with data-fusion and data-hiding approaches (Journal Article) (*Jyun-Yuan Chen and Chiao-Ling Kuo*)

S6b: Urban Analytics II (Session Chair: Tao Cheng) @Kleiner Saal

- The effect of vertical façade greenery in virtual urban environments on human emotion (*Delia Lendenmann and Sara Irina Fabrikant*)
- Characterising neighbourhood dynamics through social media anlaysis and house sales transactions (*Alexis Comber, Molly Asher, Yiyu Wang, Minh Kieu, Bui Quang Thanh, Thi Thuy Hang Nguyen, Hoang Huu Phe and Nick Malleson*)
- Impact of On-Street Parking Space Placement on Through Traffic (*Prashant Chauhan, Salil Goel and Stephan Winter*)
- Zero-shot urban function inference with street view images through prompting a pretrained vision-language model (Journal Article) (*Weiming Huang, Jing Wang and Gao Cong*)
- Understanding Pedestrian Dynamics using Machine Learning with Real-Time Urban Sensors (Journal Article) (*Molly Asher, Yannick Oswald and Nick Malleson*)

Lunch (12:00-13:00) @Wandelhalle

S7 AGILE Annual Assembly (13:00-14:00) @Grosser Saal
S8 Paper sessions (14:00-15:30)
S8a: Urban Mobility II (Session Chair: Sabine Timpf) @Grosser Saal

- Accessibility for pedestrians under heat stress - the example of Heidelberg, Germany (Full Paper) (*Johannes Huber, Christina Ludwig, Kathrin Foshag, Nikolaos Kolaxidis, Alexander Zipf and Sven Lautenbach*)
- Estimating the Ride-Sharing Potential for Universities in Hanover: An Integer Programming Approach (*Oskar Wage, Udo Feuerhake and Monika Sester*)
- Developing enriched pedestrian networks using accessibility features (*Alexandra-Ioana Georgescu, Hoda Allahbakhshi and Robert Weibel*)
- Navigating the Night: An Agent-Based Model of Nighttime Pedestrian Behaviour (*Gabriele Filomena and Marcin Woźniak*)

S8b: Spatial Analysis II (Session Chair: René Westerholt) @Kleiner Saal

- Comparison of interpolation methods in the production of rainfall-induced soil erosion maps in the urban area of Torres Novas, Portugal (*Irene Pecegueiro, Marco Painho and Ana Cristina Costa*)
- From waste to heat: A spatial analysis of the surplus heat potential for Denmark's district heating systems (*Marina Georgati, Poul Alberg Østergaard, Steffen Nielsen and Carsten Keßler*)
- How much time to include in multiscale space-time regressions? Optimising predictor variable lags (*Alexis Comber, Paul Harris and Chris Brunsdon*)
- Using a Cost-Distance Time-Geographic Approach to Identify Red Deer Habitat Use in Banff National Park, Alberta, Canada (Journal Article) (*Rebecca Loraamm and Katherine Ho*)

- Locating emergency medical services to reduce urban-rural inequalities (Journal Article) (*Weicong Luo and Jing Yao*)

Coffee/Snack break @Wandelhalle
Poster Session @Galerie
Conference Dinner

Day 4: Friday 13 June

S9 Keynote (08:30-09:30) (Session Chair: Serena Coetzee) @Marta-Fraenkel-Saal
From Data Deluge to Decision Power: Can We Make Science Matter? *(Dr. Ralf Seppelt)*
Coffee/Snack break (09:30-10:00) @Foyer
S10 Best Paper Session (10:00-12:50) (Session Chair: Rob Lemmens) @Marta-Fraenkel-Saal

Best full paper competition

- How close is "close"? An analysis of the spatial characteristics of perceived proximity using Large Language Models (*Joseph Shingleton and Ana Basiri*)
- 3D Land Use Planning: Making Future Cities Measurable with Ontology-Driven Representations of Planning Regulations (*Ayda Grisiute, Martin Raubal and Pieter Herthogs*)
- Map Generalization Method Supported by Graph Convolutional Networks (*Tianyuan Xiao, Tinghua Ai, Dirk Burghardt and Pengcheng Liu*)

Best short paper competition

- The development of landmark, route, and survey knowledge through repeated mobile map-assisted navigation episodes (*Qi Ying, Christopher Hilton, Armand Kapaj and Sara Irina Fabrikant*)
- Modelling the influence of traffic infrastructure characteristics on e-scooter accidents in the city of Zurich (*Yelu He, Cheng Fu, Wernher Brucks and Robert Weibel*)
- Developing a Spatially Explicit Humanitarian Flood Vulnerability Index for Refugee Settlements using Fuzzy Multi-Criteria Decision Analysis (*Annika Kunz, Ross Stuart Purves and Bruna Rohling*)

Announcement of AGILE 2026 & closing
Lunch @Foyer
End of Conference

Posters

Geospatial Analysis of Agricultural Soil Suitability in Mainland Portugal
Margaux Elijah Neri, Muhammad Sanan, Sara Ribeiro and Ana Cristina Costa

Illuminating Inequality: Spatial Patterns of Light Pollution and Socioeconomic Disparity Across England
Margaux Elijah Neri and Vicente Tang

Evaluating Spatial Dependency in Regional Similarities of the Population Dynamics Foundation Model
Hongyu Zhang and Grant McKenzie

An immersive approach to visualising the local impact of sea level rise on flood risks
Maximilian Elfers, Hendrik Lüning, Ben Jannis Giese, Jan Ole Becker, Luca Venier and Christian Kray

Promoting geoinformatics in Estonian schools - experiences from the project "Cool geography lesson"
Merli Neito

Exploring regional mobility patterns based on statistical grids and dynamic mobile phone data
Marton Magyar and Ossi Kotavaara

Impact of Temporary Location Visitors on Mobile App Usage in French Cities: Implications for Socio-Economic Segregation Studies
Egor Kotov, Tom Theile, Ole Hexel, Elizabeth Jacobs, Jisu Kim, Daniela Perrotta and Emilio Zagheni

Assessing Fire Susceptibility in the Carpathians: Identification of Hotspots Using a Two-Folded Machine Learning Approach
Melinda Manczinger, László Kovács and Tibor Kovács

Avian spring migration at the east Adriatic coast: coastal and sea-crossing dynamics of intensity, timing, and flight directions
Simon Hirschhofer, Baptiste Schmid, Barbara Helm, Robert Weibel and Peter Ranacher

How to assess and analyse activity spaces of adolescents in urban neighbourhoods?
Tillman Schmitz and Tobia Lakes

Is Germany experiencing urban or suburban growth? Contrasting three different urbanization classifications
Tamilwai J. Kolowa, Matthias Weigand, Ines Standfuß, Sebastian Klüsener, Nik Lomax and Hannes Taubenböck

Colouring Cities: A network of open platforms to improve the availability of data on the building stock for research, government and society
Robert Hecht, Polly Hudson, Oriol Gavaldà, Allan Hawas, Falli Palaiologou, Hendrik Herold and Taimaz Larimian

Spatial Information as a Source to Assess the Suitability of Sponge City Elements in Arid Regions
Hardy Pundt, Sophie Moneke, Prasanna Godse and Andrea Heilmann

Exploring Different Approaches to the Suburb Concept: A Case Study of Vilnius City
Kostas Gružas

Local differences in feature importance for the prediction of PM10, O3 and NOx using Dresden as example
Sophie Teichmann, Lukas Ninnemann, Jyotirmaya Ijaradar, Jochen Schanze and Hendrik Herold

On the development of a research integration tool for inter- and transdisciplinary science
Fabio Brill, Márk Somogyvári, Pedro H.L. Alencar, Jakob Fischer, Tobias Sauter and Tobia Lakes

Exploring Fuzzy Systems Descriptive Potential for Bikeability Routing
Pablo S. Löw, Jukka M. Krisp and Andreas Keler

LiDAR Point Cloud Virtual Reality Visual Evaluation Through Structural Similarity Index Measure and Edge Metric Similarity
Adibah Nurul Yunisya, Edward Verbree and P.J.M. Van Oosterom

Towards Green Cities: Analysis of the Impact of Bus-Priority Lanes and Accessibility Indicators on Emission Control for Highly Congested Metropolitan Areas During Peak Times
Levi Szamek, Daniel Abanto, Maximilliane Kitzinger, Sven Lautenbach and Alexander Zipf

Unexpected Patterns in the Covid-19 Pandemic Open Data
Claus Rinner

Organizer

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