

EuroCarto2024 Workshop
Online User Experiments:
Seeing What Map Users See without Seeing Them

Date & Location: 8 September 2023 Sunday, 13:00-17:00, TU Wien.
Karlsplatz 13, 1040, Wien, Room: AE U1-1

Organizers: Merve Keskin, Paris Lodron University of Salzburg (PLUS); Vassilios Krassanakis, University of West Attica (UNIWA); Arzu Çöltekin, University of Applied Sciences and Arts Northwestern Switzerland (FHNW)

All information can also be found at <https://eurocarto2024.org/workshop-programme/#onlineuserexperiments>

Program

13:00-13:05: Welcome speech from the workshop organizers

13:05-13:40: Keynote by Prof.Dr. Ioannis Giannopoulos* titled *Reality as a Basemap: Geographic-Aware Augmented Reality and Geovisualizations*

This keynote will explore Ioannis' latest research and visions in Geographic-Aware Augmented Reality (GeoAR) by introducing the innovative capabilities of their GeoAR technology, which allows geovisualizations to be precisely positioned at specific geographic coordinates. As this technology offers unprecedented opportunities for interacting with geovisualizations directly within their real-world context, he will discuss how research in this field can profit from the technological advancements in eye tracking and artificial intelligence.

13:40-15:25: Presentations (12 min talk + 3 min Q&A)

Online surveys/questionnaires

13:40-13:55 - Can Blurred Maps with BubbleView Mitigate Mental Shortcuts?,
Nianhua Liu, *Technical University of Munich*

13:55-14:10 - A web-based questionnaire for investigating user perception of pictorial symbols for points of interest, Eirini Nektaria Konstantinou, Andriani Skopeliti, Byron Nakos, *National Technical University of Athens*

Own user experiment tool

14:10-14:25 - Adapting to the mobile majority: A new approach to interactive map usability assessment, Stanislav Popelka, Michaela Vojtechovska, Ondrej Ruzicka, Marketa Beitlova, Zdenek Stachon, *Palacký University Olomouc*

14:25-14:40 - User Interactions with 3D Interactive Geovisualizations: A Six-Year Experiences with User Logging in Web Browser, Lukáš Herman, Dajana Snopková, *Masaryk University*

Comparative and webcam eye tracking studies

14:40-14:55 - Quantifying map user response differences between gaze and cursor activity during searching cartographic point symbols, Argyro Vlachou, Dimitrios Liaskos, Vassilios Krassanakis, *University of West Attica (UNIWA)*

14:55-15:10 - Studying visual quality of rendered graphics in a webcam eye tracking experiment, Arzu Çöltekin, Leticia Fernández Moguel, Cédric Merz, Madhumitha Murali, Alexander, Schneider, Louis Baumgartner, *University of Applied Sciences and Arts Northwestern Switzerland (FHNW)*

15:10-15:25 - Revealing Uncertainties in Noise Models: Visual Detection Using Online Webcam Eye-Tracking and Mobile Eye-Tracker, Zulfa Nur'aini 'Afifah, *University of Augsburg*

15:25-15:45 - Small break

15:45-16:25 - Hands-on webcam eye tracking exercise using realeye.io by Zulfa Afifah, Merve Keskin, Arzu Çöltekin

16:25-17:00 - Open discussion & interaction (via *miroboard* for online participants)

17:00-18:30 - Informal gathering (*tentative*) after 17:00 until the opening ceremony of EuroCarto2024

**About Prof.Dr. Ioannis Giannopoulos.* He has been a Full Professor of Geoinformation at TU Wien since 2018. Before joining TU Wien, he was a Postdoctoral Researcher and Lecturer at ETH Zurich (Swiss Federal Institute of Technology). In 2015, he earned his doctoral degree at ETH Zurich, where his dissertation was recognized with the prestigious ETH Culmann Award for outstanding work. His research interests span Human-Computer Interaction (HCI) and Geographic Information Science, with a focus on Spatial HCI, Urban Computing, Mobility, Location-Based Services (LBS), GeoAI, Mobile and Remote Eye Tracking, Pedestrian Navigation, and Visualizations and Interaction in Virtual and Mixed Environments.