

WALDO-TOBLER LECTURE

## **NEUROADAPTIVE GEOGRAPHIC INFORMATION DISPLAYS A GISCIENCE FRONTIER TO SCAFFOLD** SPATIAL LEARNING

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Human survival relies on mobility, including navigation and wayfinding, with maps playing a crucial role throughout human history. However, current growing reliance on mobile maps as interfaces to GNSS-enabled navigation systems is negatively impacting our attentional and cognitive resources and innate spatial abilities. To address spatial deskilling, we propose a neuroadaptive GIScience frontier. One goal is to develop mobile geographic information displays that adjust to navigators' cognitive load and spatial attention in real-time during mobility activities while also supporting spatial learning without compromising navigation efficiency. With this, we strive to maintain humans' independence from geoinformation technology, tailored to individual preferences and needs.

Attendees are invited to continue discussion and interaction with Prof. Fabrikant during the reception following the lecture.

Kindly register, using the QR code or visit https://forms.office.com/r/Zei3saji6a



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