

AutoCarto 2020 Workshop

Title:

GeocomputationalEd'20 Workshop II - Curriculum at all levels that bridge geography and computer science concepts

Description:

The geospatial services industry across public and private sectors shows continuing innovation and growth. A 2017 global impact study on geospatial services estimates that this industry creates approximately 4 million direct jobs and generates 400 billion U.S. dollars globally in revenue per year. The presence and contributions of geographers in this industry is crucial because they provide conceptual geographic knowledge and an understanding of spatial data quality standards, which prevents misused or mishandled spatial information, misinterpretation of spatial analyses, and misinformed decision-making. There is still a demand for geographers in this industry, although employers now prefer to also see their knowledge accompanied with skills in GIS, computer programming, data management, software development, or even computation, but they are hard to find. Efforts to build capacity for computational thinking in geography education come with many challenges.

In this workshop we invite teachers, educators, and professors from both geography and computer science disciplines to showcase teaching frameworks, curriculum, labs, or activities they have tested in their classrooms (online or offline) that teach concepts and skills that bridge geography and computer science. Workshop presenters will be invited to submit a 400-word abstract that describes their teaching activity and how they measured (or plan to measure) learning outcomes or teaching effectiveness.

This workshop builds on the [GeoEd'19 workshop that took place at 2019 ACM SIGSPATIAL](#). GeocomputationalEd'20 is a two-part workshop, where the first workshop will be held in April 2020 at the Annual Meeting of the AAG in Denver (CO), and the second part will be held in May 2020 at AutoCarto in Redlands (CA). The organizers are currently developing a proposal to publish the proceedings of both GeocomputationalEd'20 workshops in a special issue of Geoinformatica. Each workshop presenter will be invited to submit a "demo paper" of max. 2 pages by May 12, 2020.

Important Dates:

- Abstracts due (400 words): January 31, 2020
- Abstracts decisions: February 10, 2020
- Demo paper due (max. 2 pages): May 12, 2020
- GeocomputationalEd'20 Workshop II @ AutoCarto 2020: May 19, 2020

Format:

A 3.5-hour workshop including keynote speaker(s), 5-7 presenters (curriculum, hands-on exercises, demonstrations, etc), and/or group discussions

Organizers:

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Duration: 3.5 hours

Proposed Agenda:

08:30 am – 08:40 am: Introduction

08:40 am – 09:20: am: Keynote speaker

09:30 am – 10:30 am: 3 Presenters (20 minutes including Q&A x 3)

10:40 am – 12:00 pm: 3 Presenters (20 minutes including Q&A x 3) + Discussion

Acknowledgement:

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