

Open call for submissions:

Special Issue on “Computational Movement Analysis” in the *International Journal of Geographical Information Science*

As a pre-conference event to the *GIScience 2018* conference recently held in Melbourne, the workshop on *Analysis of Movement Data (AMD'2018)* has featured an array of oral presentations discussing novel techniques for analyzing and contextualizing movement data, as well as a break-out discussion on challenges and trends in movement analysis. A broad range of topics was covered concerning the analysis, modeling, and simulation of movement data in various application domains, such as animal ecology, transportation, human mobility, and health. For the aims and the program of the workshop, see [here](#).

A special issue, with the same aims and scope as the workshop, will be published in the *International Journal of Geographical Information Science (IJGIS)*. Submissions to the special issue may be made by either workshop participants or others interested in the theme. We invite submissions of full journal manuscripts that describe research that fits the general theme of Computational Movement Analysis (CMA), with particular emphasis on novel techniques that address the following examples of topics:

- Big mobility data analytics and predictive modeling
- Making movement analysis context-aware, considering the static and dynamic environment
- From individuals to collectives: Modeling and analyzing interactions between individuals
- Integrating different sensors and sensing models (checkpoint sensing vs. continuous GPS tracking)
- From analysis to modeling: Simulation of movement and mobility
- Visualization and visual analytics in support of movement analysis
- From patterns to processes: Bridging the semantic gap
- Inferring behaviors and motivations underpinning movement
- Geoprivacy issues and geomasking methods for mobility data

If you are not sure whether your potential contribution might fit the scope of this special issue, please get in touch with one of the guest editors. Note that special issues of *IJGIS* have also been published following the preceding AMD'14 and AMD'16 workshops as [30\(5\)](#) and [32\(7\)](#), respectively.

Submission procedure:

Interested authors should notify the guest editors of their intention to submit a paper contribution by sending the title and a 200 word abstract to Somayeh Dodge <sdodge@umn.edu> by 15 February 2019. The deadline for submissions of the final papers is 1 March 2019.

A condition of submission and acceptance will be that papers must pass the standard *IJGIS* review process. For author instructions please refer to the *IJGIS* journal homepage. Papers are to be submitted via the journal's Manuscript Central site: <http://mc.manuscriptcentral.com/ijgis>. Please choose 'Special Issue Paper' from the manuscript types field when doing so, and indicate 'Computational Movement Analysis' as the target issue.

Important dates:

- Send short abstract: 15 February 2019
- Full paper submission for special issue: 1 March 2019

Tentative schedule: We expect initial editorial decisions to be made in early summer of 2019, with manuscript revisions taking place over the summer. Final decisions are expected in late fall of 2019. Accepted manuscripts will go online (incl. a DOI) within few weeks after acceptance.

Guest editors:

- Somayeh Dodge, University of Minnesota, Twin Cities, USA <sdodge@umn.edu>
- Song Gao, University of Wisconsin, Madison, USA <song.gao@wisc.edu>
- Martin Tomko, University of Melbourne, Australia <tomkom@unimelb.edu.au>
- Robert Weibel, University of Zurich, Switzerland <robert.weibel@geo.uzh.ch>