

# Journal of Geographical Systems

Geographical  
Information,  
Analysis, Theory,  
and Decision

**Editors-in-Chief**

Manfred M. Fischer  
Antonio Páez

**Managing Editor**

Petra Stauffer-Steinnocher

**Honorary Editor**

Arthur Getis

**Editorial Board**

Dalia Andrienko  
Luc Anselin  
Roger S. Bivand  
Louke van Dijk  
Luzanna Dragicevic  
Bernard Fingleton  
Henk Folmer  
A. Stewart Fotheringham  
Andrew U. Frank  
Michael F. Goodchild  
Daniel A. Griffith  
Robert P. Haining  
Kingsley E. Haynes  
Geoffrey J. D. Hewings  
Geoffrey M. Jacques  
Nikolaos S. Kanaroglou  
Donald Lacombe  
James P. LeSage  
Yee Leung  
Paul Longley  
Jian Mu  
Peter Nijkamp  
Atsuyuki Okabe  
Keith Ord  
Gerard Rushton  
Harry J. P. Timmermans  
Jiefeng Wang

## ORIGINAL ARTICLES

**Rank-based Markov chains for regional income distribution dynamics**

S. Rey 115

**Indexing and querying moving objects with uncertain speed and direction in spatiotemporal databases**

Y.-K. Huang 139

**A bounding-based solution approach for the continuous arc covering problem**

R. Wei · A.T. Murray · R. Batta 161

**Spatio-temporal analysis of industrial composition with IVIID: an interactive visual analytics interface for industrial diversity**

E.A. Mack · Y. Zhang · S. Rey · R. Maciejewski 183

**Measuring geographic segregation: a graph-based approach**

S.-Y. Hong · Y. Sadahiro 211

Further articles can be found at [link.springer.com](http://link.springer.com)

**Abstracted/Indexed** in *Social Science Citation Index, SCOPUS, Astrophysics Data System (ADS), EconLit, Google Scholar, EBSCO, CSA, ProQuest, Academic OneFile, Academic Search, Business Source, Current Abstracts, Current Contents/Social & Behavioral Sciences, DBLP, Environment Index, Gale, Geobase, GeoRef, io-port.net, Journal Citation Reports/Social Sciences Edition, OCLC, PASCAL, Research Papers in Economics (RePEc), SCImago, Social SciSearch, Summon by Serial Solutions, VINITI - Russian Academy of Science*

**Instructions for Authors** for *J Geogr Syst* are available at [www.springer.com/10109](http://www.springer.com/10109)