

Seungwon Kim

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EDUCATION

Masters student Sep 2016 – Present

Department of Geographical and Sustainability Sciences, The University of Iowa, IA, USA

M.A. Sep 2013 – Aug 2015

GIS and Spatial statistics, Department of Geography, Korea University, Seoul, Republic of Korea

Thesis: Spatial Modeling of Scrub Typhus Incidence in South Korea: 2000-2010

Academic Advisor: Dr. Youngho Kim

B.A. Mar 2007 – Aug 2013

Department of Geography Education, Korea University, Seoul, Republic of Korea.

PAPER AND PRESENTATION

Papers

(*Under review*) **Kim, S.** and Kim, Y., 2016, **Hierarchical Bayesian modeling of spatio-temporal patterns of scrub typhus incidence in South Korea: 2009-2013.**

Kim, S. and Kim, Y., 2014, **Spatial analysis modeling on scrub typhus occurrence in Korea**, *The Korean Cartographic Association*, 14(3), 41-54.

Presentations

Kim, S., 2015, **Bayesian spatio-temporal analysis of scrub typhus incidence: a case study of South Korea**, 2015 Autumn Meeting of Association of Korean Geographers, Kangwon University, Chuncheon, Republic of Korea, 13 November, 2015.

Kim, S., 2014, **A Hierarchical Bayesian model for identifying risk factors of scrub typhus in South Korea**, 2014 Autumn Meeting of the Korean Cartographic Association, Korea University, Seoul, Republic of Korea, 13 December, 2014.

Kim, S., 2013, **A model comparison for scrub typhus incidence in South Korea: 2001-2010**, 2013 Autumn Meeting of the Korean Cartographic Association, Sangmyung University, Seoul, Republic of Korea, 14 December, 2013.

Posters

Kim, S., 2013, **Detection of spatial characteristics of population distribution by gender and nationality using local Moran's I and Getis's G statistics**, A competitive exhibition for national land survey, Smart Geospatial Expo 2013, Seoul, Republic of Korea.

RESEARCH EXPERIENCES

Professional Activities

Geospatial analysis [1611.A3]

Aug 2009 – Jun 2011

Institution: The Korea Army Geospatial-Intelligence Agency (KAGA), Republic of Korea

- Three-dimensional satellite image correction by adapting Rational Function Model with Rational Polynomial coefficients data provided by National Geospatial-Intelligence Agency, USA.
- Supervised and unsupervised classification for subdividing forested areas in North Korea
- Accuracy assessment of satellite images by using GPS data.
- Quality management of North Korea topographic map.

Academic Projects

Research Assistant

Sep 2012 – Nov 2012

Project name: The Compilation of Digital Historical Atlas in Modern Korea

- Digitizing railroad construction during the Japanese colonial period (1905-1945)
- Topology analysis of polygon data

Research Assistant

Dec 2014 – Dec 2015

Project name: Space-time analysis of minority groups in modern Korea: hybrid analysis of quantitative geography and qualitative history methodologies on women, ethnic minorities, and disabled people in Japanese colonial era using census information and historical literature

- Space-time clustering of industrial facilities using census information during the Japanese colonial era.
- Image correction and geo-referencing of scanned topographic maps of Kyungseong (The former name of Seoul, the capital of South Korea).
- Digitizing administrative area boundary during the period

Assistant

Assistant administrator

Sep 2013 – Apr 2016

Institution: The Korean Cartographic Association, Seoul National University, Seoul, Republic of Korea

CERTIFICATES

Apr 2011 **The Certificate for Craftsman Aerial Photograph**, Issued by the Ministry of Land, Infrastructure and Transport, Korea.

Aug 2013 **The Certificate for Middle/High School Teacher in Geography**, Issued by the Ministry of Education, Korea.

COMPUTER SKILLS

- **GIS:** ArcGIS, ENVI
- **Statistical analysis:** R
- **Bayesian inference:** WinBUGS, OpenBUGS
- **Programming:** Python