

# Hoeyun Kwon

216 Jessup Hall, Iowa City, IA 52242  
hoeyun-kwon@uiowa.edu

## Research Interests

---

Geographic Information Science, Spatio-Temporal Data Mining, Big Data and Social Media Analytics, Natural Language Processing, Natural Hazards

## Education

---

### Ph.D. Student

August 2018 – Present

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

### Master of Arts in Geography

February 2016

Ewha Womans University, Seoul, South Korea

Thesis: A study on the risk analysis and applicability of SNS data for detecting signs of disaster

Advisor: Dr. Youngok Kang

### Bachelor of Arts in Geography Education

February 2014

Ewha Womans University, Seoul, South Korea

## Employment

---

### Graduate Teaching Assistant

August 2018 – Present

The University of Iowa

- GEOG 1050 Foundations of GIS (Fall 2019, Spring 2020)

### Researcher

January 2016 – July 2018

Spatial Information Industry Promotion Institute of Korea, Seongnam, South Korea

### Graduate Research Assistant

March 2014 – January 2016

Ewha Womans University

## Publications

---

- [6] **Kwon, H.**, & Kang, Y. (2016). Risk analysis and visualization for detecting signs of flood disaster in Twitter. *Spatial information research*, 24(2), 127-139.  
<https://doi.org/10.1007/s41324-016-0014-1>

### Publications in Korean

- [5] Seok, S., **Kwon, H.**, Song, K., Lee, H., & Hwang, J. (2017). Development of GIS-based RCPI (Regional Crime Prevention Index) to support crime prevention activities in urban environments. *Journal of Korea Society of Computer and Information*, 22(1), 41-48.  
<https://doi.org/10.9708/jksoci.2017.22.01.041>
- [4] **Kwon, H.**, Song, K., Seok, S., Jang, H., & Hwang, J. (2016). Development of social map prototype for intelligent crime prevention based on geospatial information. *Journal of Korea*

*Society of Computer and Information*, 21(8), 49-55.

<https://doi.org/10.9708/jksoci.2016.21.8.049>

- [3] Song, K., Seok, S., **Kwon, H.**, & Hwang, J. (2016). A study on the improvement of ‘Geospatial Information Open Platform’ for geospatial information convergence industry. *Journal of Korea Society of Computer and Information*, 21(7), 31-38.  
<https://doi.org/10.9708/jksoci.2016.21.7.031>
- [2] Kang, Y., & **Kwon, H.** (2015). User requirements analysis for vitalization of Open-source GIS software in Korea. *Journal of Korea Spatial Information Society*, 23(6), 99-107.  
<https://doi.org/10.12672/ksis.2015.23.6.099>
- [1] Kang, Y., Kang, A., & **Kwon, H.** (2014). An analysis of Open-source GIS software ecosystem in Korea. *Journal of Korea Spatial Information Society*, 22(6), 67-79.  
<https://doi.org/10.12672/ksis.2014.22.6.067>

## Presentations (The presenter is underlined)

---

- [12] **Kwon, H.** & Koylu, C. (April 2019). Empirical evaluation of parameters and models for extracting topics from geo-tagged social media data. *AAG Annual Meeting, Social Media and Big Data II*, Washington D.C.
- [11] Zhang, B., Koylu, C., Oberlin, K., Eckstein, B., & **Kwon, H.** (April 2019). Climate change or natural cycle? Not sure, but it gets 2 hot and 2 cold 4 sure, *AAG Annual Meeting, Symposium on Frontiers in Geospatial Data Science: Synergizing Geospatial Data Science with Domain Applications I: Climate Science*, Washington D.C.
- [10] Lee, S., **Kwon, H.**, Song, K., Lee, S., & Hwang, J. (November 2018). A Study on the Development of Value Index for Decision Support of Crime Prevention Policy - A Case Study of Park Crime Safety. *The Korean Society for Geospatial Information Science*, Jeju, South Korea
- [9] Hwang, J., Song, K., **Kwon, H.**, Lee, S., & Choi, H. (October 2017). Development of R&D roadmap for vitalizing geospatial information convergence industry of Korea. *The Korea Spatial Information Society*, Jeonju, South Korea.
- [8] **Kwon, H.**, Song, K., Seok, S., & Hwang, J. (June 2017). A study on geospatial information convergence research trends using Knowledge Map. *The Korea Spatial Information Society*, Seoul, South Korea.
- [7] Seok, S., **Kwon, H.**, Song, K., Lee, H., & Hwang, J. (April 2017). Development of RCPI (Regional Crime Prevention Index) for decision support of crime prevention policy. *The Korean Society for Surveying, Geodesy, Photogrammetry, and Cartography*, Yeosu, South Korea.
- [6] **Kwon, H.**, & Kang, Y. (June 2016). Risk analysis and visualization for detecting signs of flood disaster in Twitter. *The Korean Geographical Society*, Seoul, South Korea.
- [5] **Kwon, H.**, & Kang, Y. (June 2016). Location inference and risk analysis of flood-related Tweets. *The Korea Spatial Information Society*, Anyang, South Korea.
- [4] Seok, S., **Kwon, H.**, Song, K., & Hwang, J. (June 2016). Standardization of underground shopping center addresses for disaster response and an integrated use of indoor spatial information. *The Korea Spatial Information Society*, Anyang, South Korea.
- [3] **Kwon, H.**, Song, K., Seok, S., & Hwang, J. (May 2016). A study on the policies for vitalizing geospatial information convergence. *The Korean Society for Geospatial Information Science*,

Jeju, South Korea.

- [2] **Kwon, H.**, Song, K., Seok, S., Kim, B., & Hwang, J. (May 2016). A study on the emerging technology of geospatial information convergence. *The Korean Society for Geospatial Information Science*, Jeju, South Korea.
- [1] Seok, S., Song, K., **Kwon, H.**, & Hwang, J. (April 2016). A study on the classification of geospatial information convergence industry. *The Korean Society for Surveying, Geodesy, Photogrammetry, and Cartography*, Suwon, South Korea.

## Honors and Awards

---

Most Cited Paper Award (Kwon and Kang, 2016) The Korea Spatial Informational Society	May 2019
Open-source Geospatial Platform Use Case Contest 1 <sup>st</sup> Prize (\$200) Korea Research Institute for Human Settlements	November 2015
Scholarship Program for Talented Graduate Students (\$24,000) Ministry of Land, Infrastructure and Transport, Korea	2014 – 2015
University Fellowship (\$25,400) Ewha Womans University	2014 – 2015
Honors Scholarship (\$1,000) Ewha Womans University	2013

## Certificate

---

Certified Middle/High School Teacher in Geography (Issued by the Ministry of Education, Korea)	2014
---	------

## Programming and Software Skills

---

Python, Java, SQL, R, Weka, ArcGIS, QGIS