

David Kim

<https://davidkim19840101.wixsite.com/website>

+1 352 745 9387, davidkim@ufl.edu

EDUCATION

University of Florida

Gainesville, Florida, United States

Jan. 2021-Present

- College of Design, Construction, and Planning (DCP) - Urban and Regional Planning, Ph.D. Program
 - Research Interests: Spatio-temporal analysis based on the relationship between climate change and the real estate market of coastal areas
- GPA 3.95 / 4.0 (98.75%), Spring 2021-Fall 2023
- ***Graduate School Funding Award (GSFA)***

Seoul National University

Seoul, Republic of Korea

Mar. 2009-Feb. 2011

- Graduate School of Environmental Studies (GSES)
- Master of City Planning
 - Thesis: A Study on Characteristics of Regions that Affect Residence Decisions of Art-Creating Groups
- GPA 4.1 / 4.3 (97%)

Handong Global University

pohang, Republic of Korea

Mar. 2002-Feb. 2009

- Bachelor of Science in Urban and Environmental Engineering
- Bachelor of Science in Construction Engineering
- GPA 4.1 / 4.5 (95%)
- ***Graduated with First Class Honors***

WORK&RESEARCH EXPERIENCE

Korea Research Institute for Human Settlements

Sejong, Republic of Korea

Associate Research Fellow

June 2019-Present

Assistant Research Fellow

Mar. 2012-June 2019

■ Research Projects

**Only most recent and topical listed (full list)*

- National Territory and Urban Big Data Center for Innovative and Inclusive Growth (2020)
 - Developing a center on national and urban big data for data collecting, refining, fusion, and for improving models, big data networks and data infrastructure
 - Granted \$336,000 by the National Information Society Agency
 - *Role: Vice-Principal Investigator*

- Development of Spatial Simulation Model for Smart City Mangement (2020)
 - Simulating urban sprawl for smart management
 - Granted \$92,400 by National Information Society Agency
 - *Role: Collect, refine, and analyze sprawl-related data into cells with GIS and R; monitor PyTorch based simulation*
- The Development and Application of a Balanced National Development Analysis Model based on Big Data (2020)
 - Developing a socio-economic big data-based micro-dynamic methodology for analyzing balanced national development
 - Granted \$32,600 by KRIHS
 - *Role: Refine, density analyze, and visualize income and spatial data with R and GIS*
- Developing a Youth-friendly Industrial Zone Strategy (2018) (Granted \$32,000 by KRIHS)
 - *Role: Collect, refine, and fuse insurance data analysis with R*
- Big Data Based Urban Polarization and Gentrification Analysis Modeling (2018)
 - Analyze and visualize Seoul's spatial income distribution
 - Granted \$12,479 by the Seoul Metropolitan Government
 - *Role: Collect and refine income data and visualize it with R and GIS*
- Sejong City Growth Management Plan (2018)
 - Simulate Sejong City's Sprawl and Establish a Management Plan
 - Granted \$378,000 by Sejong City
 - *Role: Run SELUTH model with GIS, Cygwin*
- Ulsan/Gyeongbuk Linked Cooperation Regional Planning Research (2018)
 - Regional planning for a Ulsan-Pohang-Gyeongju city network
 - Granted \$427,000 by the Ministry of Land, Infrastructure, and Transport
 - *Role: Population movement analysis based on cellphone user data*
- 5th National Territorial Planning (2020-2040) (II) (2020)
 - Long term national spatial planning
 - Granted \$336,000 by the Ministry of Land, Infrastructure and Transport
 - *Role: Managing team members; network analysis based on transportation data with NetMiner; mapping with GIS*
- Monitoring and Simulation of Urban Polarization by Using Financial and Spatial Big Data (2017)
 - Spatial polarization analysis of Busan with big data
 - Granted \$98,000 by the National Information Society Agency
 - *Role: Big data analysis of income with R and GIS mapping*
- Monitoring Methods for Land Use Cover Change using Deep Learning Algorithms (2018)
 - Granted \$59,000 by KRIHS
 - Preceding research survey on land use mapping methods

Millennium Promise, Inc. & Merry-Year International

Malawi

Project Consultant, Intern

July 2011-June 2012

- Creating GIS village maps with local youth by educating them on the use of GPS

PUBLICATIONS
AND
PRESENTATION

■ **Simulation, Visualisation, Deep Learning, and Big Data Related**

**Only recent or major publications and presentations ([full list](#))*

Journal Papers

Donghan Kim, and David Kim. 2018. Development and application of dynamic visualization model for spatial big data, *Journal of the Korean Association of Geographic Information Studies*. 21(1), 57–70.
<http://dx.doi.org/10.11108/kagis.2018.21.1.057>

International Conference Posters

David Kim. 2017. *Dynamic Visualization of Mobile Big Data for Planning Support: A Case Study on Jeju Island*. 15th International Conference on Computers in Urban Planning and Urban Management (CUPUM). Adelaide, Australia

Research Projects

See above “Work & Research Experience”

Conference Proceedings

Kihwan Seo, Changwha Oh, David Kim, Min-Yeong Lee, and Yoon-Jung Yang. 2019. An empirical study on automatic building extraction from aerial images using a deep learning algorithm, in *Proceedings of the 2019 Spring Conference of the Korean Society for Geospatial Information Science*. **Best Paper Award, Presenter: David Kim**

Kihwan Seo, Changwha Oh, David Kim, Min-Yeong Lee, and Yoon-Jung Yang. 2018. A Study on Land-use/Land-cover Monitoring Using Aerial Ortho-Photo and Deep Learning Algorithm, in *Proceedings of the 2018 Fall Conference of the Korean Society for Geospatial Information Science*

Donghan Kim, and David Kim. 2017. Urban polarization analysis and visualization using financial and spatial big data, in *Proceedings of the 2017 Fall Conference of the Korea Intelligent Information Systems Society*

David Kim, and Mack-Joong Choi. An Empirical Study on the City’s Creative Environment’s Impact on Attracting Creative Class (2010), Korea Planners Association

TEACHING

Texas A&M University

Texas, U.S.A, 2015

- Delivered online lecture about Korean National Spatial Planning

Daegu Dukhwa Middle School

Daegu, Korea, 2015

- Delivered lecture at National Territory Education Program for Teachers

HONORS AND AWARDS

Certificates of Outstanding Merit, University of Florida, 2022

Graduate School Funding Award (GSFA), College of Design, Construction, and Planning, University of Florida, 2021 - 2024

- Planed to continue for 4 years, renewed annually

Best Paper Award, Korea Spatial Information Society (KSIS), 2019

- Participated as third author and presented research

Outstanding Research Award, Korea Research Institute for Human Settlements (KRIHS), 2018, 2019

- Participated in four awarded projects as research team member

KRIHS Presidential Commendation, Korea Research Institute for Human Settlements (KRIHS), 2015

Superior Academic Performance Scholarship, Seoul National University, 2009 second semester, 2010 first and second semesters

Graduate Student Outstanding Paper Award (second author), Citibank & Korea Institute of Finance, 2009

Graduate Student Best Paper Award (second author), Korean Association for Housing Policy Studies, 2009

Pohang Mayor's Prize, Pohang City, 2009

Awards of Excellence (Graduated with First Class Honors), Handong Global University, 2009

National Science & Technology Scholarship, Korea Science and Engineering Foundation (KSEF), 2007

Superior Academic Performance Scholarship, Handong Global University, 2003 and 2004 first semester, 2008 first and second semester

QUALIFICATIONS
AND SKILLS

Computer

Spatial Analysis Tools : ArcGIS, ArcGISPro, S-Cube

Programing and Statistics : Python, R, SPSS, JMP

Network Analysis : Gephi, NetMiner, UCINET

Visualization : Processing