

# CURRICULUM VITAE

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## **Current Position:**

### **Professor**

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## **Education:**

1995 – 2001 **Ph.D.**, Department of Geography, The Ohio State University, Columbus, Ohio, USA  
1991 – 1994 **M.C&RP.**, Department of City and Regional Planning, The Ohio State University, Columbus, Ohio, USA  
1985 – 1987 **M.E.**, Department of Architecture, Pusan National University, Pusan, South Korea  
1980 – 1984 **B.E.**, Department of Architecture, Pusan National University, Pusan, South Korea

## **Professional Appointments:**

2014 – Current **Professor**, Department of Geoinformatics, The University of Seoul, South Korea  
2007 – 2014 **Associate Professor**, Department of Geoinformatics, The University of Seoul, South Korea  
2004 – 2007 **Assistant Professor**, Department of Geography and Earth Sciences, The University of North Carolina at Charlotte, Charlotte, NC, USA  
2001 – 2004 **Assistant Professor**, Department of Geography, Minnesota State University, Mankato, MN, USA  
2000 – 2001 **Teaching/Research Assistant**, Department of Geography, The Ohio State University, Columbus, OH, USA  
1994 – 2001 **GIS Manager/Analyst**, Delaware County Regional Planning Commission, Delaware, OH, USA  
1992 – 1994 **GIS Intern**, Delaware County Regional Planning Commission, Ohio  
1987 – 1990 **Research Fellow and Lecturer**, Department of Engineering Graphics, Korean Military Academy, Seoul, South Korea.  
1984 – 1987 **Research Assistant**, Urban Affair Research Institute, Pusan National University, Pusan, South Korea.

## **Research Interests:**

- Geographic Information Science: 3D GIS Data Model and Geo-Visualization
- Integration between Indoor and Outdoor Spatial Data
- Indoor GIS: Indoor Spatial Data Model
- Application of Quantitative Methods in Location, Transportation, environmental and Land Use Planning
- Data Integration in Digital Twin City
- Pedestrian Accessibility Analysis in 3D Urban Environments
- Spatial Decision Support System (SDSS) and GIS Application Development

## **Teaching Experience:**

- 2014 – Current      **Professor**, Department of Geoinformatics, University of Seoul, South Korea
- ♣ **Courses Taught**
- Advanced Geographic Information Systems (GIS)
  - Advanced 3D GIS
  - Spatial Data Models and Structures in GIS
- 2007 – 2014      **Associate Professor**, Department of Geoinformatics, University of Seoul, South Korea
- ♣ **Courses Taught**
- Introduction to Geographic Information Systems (GIS)
  - Three Dimensional GIS
  - Land and Urban Information Systems
  - Spatial Data Models and Structures in GIS
  - Advanced 3D GIS
- 2004 – 2007      **Assistant Professor**, Department of Geography and Earth Sciences, The University of North Carolina at Charlotte, Charlotte, NC, USA
- ♣ **Courses Taught**
- Introduction to Geographic Information Systems (GIS)
  - Three Dimensional Visualization of Geographic Information
  - Spatial Database Development with GPS and GIS
  - GIS and Spatial Data Analysis
  - Programming and Customization in GIS
  - Exploring Urban Community with GIS
- 2001 – 2004      **Assistant Professor**, Department of Geography, Minnesota State University, Mankato, MN, USA
- ♣ **Courses Taught**
- Introduction to Geographic Information Systems (GIS)
  - Advanced GIS
  - GIS Practicum: Information System Analysis and Implementation
  - GIS Technologies: Internet / Mobile GIS
  - Field Mapping with Global Positioning System (GPS)
  - GIS for Planners
- 2000 – 2001      **Teaching Assistant**, Department of Geography, The Ohio State University, Columbus, OH, USA
- ♣ **Courses Taught**
- Intermediate Geographic Information Systems (GIS)

1987 – 1990 **Full-time Instructor**, Department of Engineering Graphics, Korean Military Academy, Seoul, Korea.

♣ **Courses Taught**

- Introduction to Pictorial Projections and Descriptive Geometry
- Graphic Vector Analysis in Three-Dimension
- Urban Planning Methodology and Architectural Design

**Professional Experience:**

1994 – 2001 **GIS Analysis / Manager**, Delaware County Regional Planning Commission (DCRPC), Delaware, Ohio, USA

♣ **Projects**

- Township/County-wide Building Permit Tracking System
- County Sewer Capacity Management System using GIS
- Land Development Suitability Analysis for Sawmill Parkway Plan
- Analyzing Development Impacts on Natural Resources by Watershed
- Implementing Transfer Development Right (TDR) Program in GIS
- Developing Highway Access Management System
- Radon Level Spatial Analysis in Delaware County (Decision Making System with GIS)
- Developing GIS Land Suitability Models for Countywide Land Use Comprehensive Plan
- Agricultural Land Evaluation Site Assessment (LESA) system of Delaware County with GIS
- Township/County Comprehensive Land Use Plans
- Projecting Long-term (to 2020) Land Use Development Pattern for Delaware County Thoroughfare Plan
- Developing DCRPC Interactive Mapping Systems through Internet/Intranet (using ArcIMS)
- Designing and managing DCRPC'GIS Database (70 data layers)
- Managing a Departmental Network System and Web Server

1984 – 1987 **Graduate Research Associate**, Urban Affair Research Institute, Pusan National University, Pusan, South Korea

♣ **Projects**

- Urban Design of Hea-Woon District, Pusan, South Korea
- Renewal Development Plan of Chang-Won City, South Korea
- Master Plan of Ul-Sook New Town, Pusan, South Korea
- General Plan of Dea-Sin Park, Pusan, South Korea

**Publications:**

***Publications:***

- 2024 Misun Kim, Jeongwon Lee and Jiyeong Lee. A Framework for Generating IndoorGML Data from Omnidirectional Images, *Recent Advances in 3D Geoinformation Science, Lecture Notes in Geoinformation and Cartography*, Eds. T.H. Kolbe et al. , Springer, p. 605-615.  
[https://doi.org/10.1007/978-3-031-43699-4\\_37](https://doi.org/10.1007/978-3-031-43699-4_37)
- 2023 Alexis Claridades and Jiyeong Lee, Developing a Strategy for Integrating Network Datasets for Supporting Multimodal Transportation, *Journal of Korea Society of*

- Surveying, Geodesy, Photogrammetry and Cartography*, **41**(6), pp.585-603.  
<https://doi.org/10.7848/ksgpc.2023.41.6.585>
- 2023 Munsu Kim and Jiyeong Lee, A Study on the 3-Dimensional Framework for Defining Level of Implementing Digital Twin, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **41**(6), pp.537-550.  
<https://doi.org/10.7848/ksgpc.2023.41.5.537>
- 2023 Alexis Claridades, Hyun-Sang Choi and Jiyeong Lee, Detecting Building Entrances on Street View Images Using Deep Learning for Supporting Indoor-Outdoor Seamless Services, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **41**(5), pp.351-365.  
<https://doi.org/10.7848/ksgpc.2023.41.5.351>
- 2023 Misun Kim, Hyun-Sang Choi and Jiyeong Lee, A Model for Generating Network-based Indoor Topology Data using an Omnidirectional Image Dataset, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **41**(5), pp.367-382. <https://doi.org/10.7848/ksgpc.2023.41.5.367>
- 2023 Seokchan Kang, Jeongwon Lee and Jiyeong Lee, Developing a Method to Automatically Extract Road Boundary and Linear Road Markings from a Mobile Mapping System Point Cloud Using Oriented Bounding Box Collision-Detecting Techniques, *Remote Sensing*, **15**, 4656. <https://doi.org/10.3390/rs15194656>
- 2023 Namgyun Chon and Jiyeong Lee, Road Alignment History Management Model using Geographic Coordinates of the Station, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **41**(4), pp.247-255.  
<https://doi.org/10.7848/ksgpc.2023.41.4.247>
- 2023 HyeongRae Ham, Misun Kim and Jiyeong Lee, Developing a method for constructing train datasets using National Base Map and aerial orthographic images, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **41**(3), pp.167-177. <https://doi.org/10.7848/ksgpc.2023.41.3.167>
- 2023 Seokchan Kang, Jeongwon Lee and Jiyeong Lee, Hierarchical Structuring Method for Large-Capacity MMS Point Cloud Data, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **41**(2), pp.109-125.  
<https://doi.org/10.7848/ksgpc.2023.41.2.109>
- 2023 Alexis Claridades, Misun Kim, and Jiyeong Lee, Developing a Method to Express Spatial Relationships on Omnidirectional Images for Indoor Space Representation to Provide Location-based Services, *ISPRS, International Journal of Geo-Information*, **2023**, **12**, 101. <https://doi.org/10.3390/ijgi12030101>
- 2023 Jeongwon Lee, Gyuri Park, Hyun-Sang Choi and Jiyeong Lee, Measuring Individual Walking Accessibility based on Preference for Urban Walking Environment, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **41**(1), pp.297-311. <https://doi.org/10.7848/ksgpc.2023.41.1.1>
- 2023 Misun Kim and Jiyeong Lee, Developing a Method to Detect Indoor Spatial Entities in Omnidirectional Images for Constructing IndoorGML Data, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **41**(1), pp.1-16.  
<https://doi.org/10.7848/ksgpc.2023.41.1.16>
- 2022 Hyeongmo Koo, S. Lee, Jiyeong Lee, D. Cho, Spatio-Temporal Variability of the Impact of Population Mobility on Local Business Sales in Response to COVID-19 in Seoul, Korea, *ISPRS, International Journal of Geo-Information*, **2022**, **11**, 552.  
<https://doi.org/10.3390/ijgi11100532>
- 2022 Jae-Hyun Chae, Hyun-sang Choi and Jiyeong Lee, A Study in IFC Extended and GIS linkage using BIM as Facility Management – Case Study on Bridge and Tunnel of Infra BIM-, *Journal of KIBIM*, **12**(3), pp.1-17.  
<https://doi.org/10.13161/kibim.2022.12.3.001>

- 2021 Alexis Claridades and Jiyeong Lee, Establishing Indoor Subspacing Requirements of an LoD Model for Generating Network-based Topological Data, *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, **Vol. XLVI-4/W-6-2021**.  
<https://doi.org/10.5194/isprs-archives-XLVI-4-W6-2021-97-2021>
- 2021 Misun Kim, Hyun-Sang Choi and Jiyeong Lee, Comparative Analysis of Building Models to Develop a Generic Indoor Feature Model, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **39**(5), pp.297-311.  
<https://doi.org/10.7848/ksgpc.2021.39.5.297>
- 2021 Alexis Claridades, Misun Kim and Jiyeong Lee, Towards Representing Transitional Spaces: Developmental Direction for IndoorGML Anchor Node, *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, **Vol. XLVI-4/W-4-2021**, pp.11-16.  
<https://doi.org/10.5194/isprs-archives-XLVI-4-W4-2021-11-2021>
- 2021 Alexis Claridades and Jiyeong Lee, Defining a Model for Integrating Indoor and Outdoor Network Data to Support Seamless Navigation Applications, *ISPRS, International Journal of Geo-Information*, **10**(8), **565**.  
<https://doi.org/10.3390/ijgi10080565>.
- 2020 Alexis Claridades and Jiyeong Lee, Determining Spatial Neighborhoods in Indoor Space using Integrated IndoorGML and IndoorPOI data, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **38**(5), pp.467-476.
- 2020 S-K Nam, H. Jang, H-Y Kang, H-S Choi and Jiyeong Lee, A Study of IndoorGML Automatic Generation using IFC – Focus on Primal Space , *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **38**(6), pp.623-633.
- 2020 Alexis Claridades and Jiyeong Lee, Determining Spatial Neighborhoods in Indoor Space using Integrated IndoorGML and IndoorPOI data, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **38**(5), pp.467-476.
- 2020 Dasol Ahn, Alexis Claridades and Jiyeong Lee, Integrating Image and Network-Based Topological Data through Spatial Data Fusion for Indoor Location-based Services, *Journal of Sensors*, Vol. 2020, Article ID 8877739, 16 pages,  
<https://doi.org/10.1155/2020/8877739>.
- 2020 Kangjae Lee, Alexis Claridades and Jiyeong Lee, Improving a Street-based Geocoding Algorithm using Machine Learning Techniques, *Applied Sciences*, Vol. 10, Issue 16, 5628..
- 2020 Alexis Claridades and Jiyeong Lee, Developing a Data Model of Indoor Points of Interest to Support Location-Based Services, *Journal of Sensors*, Vol. 2020, Article ID 8885384, 16 pages, <https://doi.org/10.1155/2020/8885384>.
- 2019 Alexis Claridades, Dasol Ahn and Jiyeong Lee, Developing a Data Fusion Strategy between Omnidirectional Image and IndoorGML Data, *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, **Vol. XLII-4/W-19**, pp.117-124.
- 2019 Yun-Jee Jeong and Jiyeong Lee, Comparative Analysis on Korean, Germany and France Cadastral System using Comparative Analysis Model for Cadastral System, *Journal of Korean Cadastre Information*, **21**(3), pp.3-17.
- 2019 Jiyeong Lee, Jung H.S, Zlatanova S., Pradhan B., Editorial, *International Journal of Urban Sciences*, **23**, pp.301-302.
- 2019 Alexis Claridades, Inhye Park and Jiyeong Lee, Integrating IndoorGML and Indoor POI for Navigation Application in Indoor Space, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **37**(5), pp.359-366.
- 2019 Ho-Jin Yoo and Jiyeong Lee, Developing a Method to Define Mountain Search Priority Areas Based on Behavioral Characteristics of Missing Persons, *Journal of*

- Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **37**(5), pp.293-302.
- 2019 Taehoon Kim, K-S Kim, and Jiyeong Lee. How to Extend IndoorGML for Seamless Navigation between Indoor and Outdoor Spaces, *W2GIS2019: Web and Wireless Geographical Information Systems: Springer's Lecture Notes in Computer Science (LNCS 11474)*. New York: Springer, p. 46-62.
- 2019 Yun-Jee Jeong and Jiyeong Lee, Spatial Data Management Analysis on Migration and Settlement to Jeju Island, *Journal of Korean Cadastre Information*, **21**(2), pp.36-44.
- 2019 Jihye Choi and Jiyeong Lee, Developing an Alias Management Method based on Word Similarity Measurement for POI Applications, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **37**(2), pp.79-87.
- 2018 Hye Young Kang, S. Nam, J. Hwang and Jiyeong Lee, LoD (Level of Detail) Model for Utilization of Indoor Spatial Data, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **36**(6), pp.545-554.
- 2018 Jihye Choi and Jiyeong Lee, Redefining Korean Road Name Address System to Implement the Street-Based Address System, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **36**(5), pp.381-394.
- 2018 Alexis Claridades, Jiyeong Lee and Ariel Bronco, Using Omnidirectional Images for Semi-Automatically Generating IndoorGML Data, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **36**(5), pp.319-333.
- 2018 Jung Eun Kim, Yun-Ji Kim and Jiyeong Lee, Development of Cadastral Data Model based on LADM to Manage Cadastre Survey Results in Korea, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **36**(3), pp.165-176.
- 2018 Seokchan Kang and Jiyeong Lee, Improving rendering speed of 3D geospatial data based on HTML5/WebGL using improved arithmetic operation speed, *International Journal of Urban Sciences*, <https://doi.org/10.1080/12265934.2018.1476175>.
- 2018 Junho Park, Dasol Ahn and Jiyeong Lee, Development of Data Fusion Method based on Topological Relationships using IndoorGML Core Module, *Journal of Sensors*, Vol. 2018, Article ID 4094235, 14 pages, <https://doi.org/10.1155/2018/4094235>.
- 2017 Jae-Hyun Chae and Jiyeong Lee, Definition of 3D Modeling Level of Detail in BIM Re-generation through Reverse Engineering – Case Study on 3D Modeling using Terrestrial LiDAR -, *Journal of KIBIM*, **7**(4), pp.8-20.
- 2017 Hyo-jin Jung and Jiyeong Lee, Development of an Omnidirectional-Image-based Data Model through Extending the IndoorGML Concept to an Indoor Patrol Service, *Journal of Sensors*, Vol. 2017, Article ID 5379106, 14 pages, <https://doi.org/10.1155/2017/5379106>.
- 2017 Seokchan Kang and Jiyeong Lee, Developing a Tile-based Rendeing Method to Improve Rendering Speed of 3D Geospatial Data with HTML5 and WebGL, *Journal of Sensors*, Vol. 2017, Article ID 9781307, 11 pages, <https://doi.org/10.1155/2017/9781307>.
- 2017 Junho Park and Jiyeong Lee, Establishing Required LoD and Positioning Accuracy for Indoor Spatial Information Applications in Public Administrative Works, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **35**(2), pp.103-112.
- 2017 Kangjae Lee, Jiyeong Lee and Mei-Po Kwan, Location-based service using ontology-based semantic queries: A study with a focus on indoor activities in a university context, *Computers, Environment and Urban Systems*, **62**, pp.41-52.
- 2016 Junho Park, Hye-Young Kang and Jiyeong Lee, A Spatial-temporal POI Data Model for Implementing Location-based Services, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **34**(6), pp.609-618.



- 2016 Munsu Kim, Hye-Young Kang and Jiyeong Lee, A Study on the Implementation of Indoor Topology Using Image Data, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **34**(3), pp.329-338.
- 2016 Sangmuk Seok and Jiyeong Lee, Development of Geocoding and Reverse Geocoding Method Implemented for Street-based Addresses in Korea, *Journal of Korea Society of Surveying, Geodesy, Photogrammetry and Cartography*, **34**(1), pp.33-42.
- 2015 Munsu Kim and Jiyeong Lee, A Data Transformation Method for Visualizing the Statistical Information based on the Grid, *Journal of Korea Spatial Information Society*, **23**(5), pp.31-40.
- 2015 Hyo-jin Jung and Jiyeong Lee, Analysis of Eunpyeong New Town Land Price Using Geographically Weighted Regression, *Journal of Korea Spatial Information Society*, **23**(5), pp.65-73.
- 2015 Sangmuk Seok and Jiyeong Lee, A Study on Establishing Circulatory System for National Spatial Data Infrastructure Standardization in Korea, *Journal of Korea Spatial Information Society*, **23**(4), pp.23-32.
- 2015 Sangmuk Seok and Jiyeong Lee, A Study on the Correlation between Road-kill Hotspot and Habitat Patches, *Journal of the Environment Impact Assessment*, **24**(3), pp.233-243.
- 2015 Hyeyoung Kang, Hyo-jin Jung and Jiyeong Lee, A Study of Subspacing Strategy for Service Applications in Indoor Space, *Journal of Korea Spatial Information Society*, **23**(3), pp.113-122.
- 2014 Yun Ji Kim, Byoung Min Yoo, Jiyeong Lee, Evaluation on Practical Use of Raw Data for 3D Indoor Space Modelling, *Journal of Korea Spatial Information Society*, **22**(6), pp.33-43.
- 2014 Inhye Park, Jiyeong Lee, Saro Lee, Ensemble of Ground Subsidence Hazard Maps using Fuzzy Logic, *Central European Journal of Geosciences*, **6**(2), pp.207-218.
- 2014 Jiyeong Lee, Mei-Po Kwan, Spatiotemporal Routing Analysis for Emergency Response in Indoor Space, *Journal of the Korean Society of Surveying, Geodesy, Photogrammetry and Cartography*, **32**(6), pp.637-650.
- 2014 Yunji Kim, Hyeyoung Kang and Jiyeong Lee, Developing CityGML Indoor ADE to Manage Indoor Facilities, *Springer: Innovations in 3D Geo-Information Sciences*, pp.243-265.
- 2014 Jiyeong Lee, Hye Young Kang, Yun Ji Kim, Developing Data Fusion Method for Indoor Space Modeling based on IndoorGML Core Module, *Journal of Korea Spatial Information Society*, **22**(2), pp.31-44.
- 2014 Hye Young Kang and Jiyeong Lee, A Study on the LOD(Level of Detail) Model for Applications based on Indoor Space Data, *Journal of the Korean Society of Surveying, Geodesy, Photogrammetry and Cartography*, **32**(2), pp.143-151.
- 2013 Lee, Kangjae and Kang, Hye-Young and Lee, Jiyeong, Topological Analysis in Indoor Shopping Mall using Ontology, *Journal of the Korean Society of Surveying, Geodesy, Photogrammetry and Cartography*, **31**(6), pp.511-520.
- 2013 Jiyeong Lee, Emergency Response in Indoor Environment, *Geospatial Today July*, pp.30-39.
- 2013 Yoonjee Jeong and Jiyeong Lee, A Study on Analysis of Multi-dimensional Rights in Land for 3D Cadastre Registration, *Journal of Korea Cadastre Information Association*, **15**(1), pp.35-49.
- 2013 Heemin You, Donghoon Jeong and Jiyeong Lee, Developing methodology of 3D Cadaster Feature Model using Cadastre Process Analysis, *Journal of Korea Spatial Information Society*, **21**(3), pp.55-69.

- 2013 Kijoune Li and Jiyeong Lee, Basic Concepts of Indoor Spatial Information Candidate Standard IndoorGML and its Applications, *Journal of Korea Spatial Information Society*, **21**(3), pp.1-10.
- 2013 Hyeyoung Kang, Jungrae Hwang and Jiyeong Lee, A Study on the Development of Indoor Spatial Data Model Using CityGML ADE, *Journal of Korea Spatial Information Society*, **21**(2), pp.11-21.
- 2013 Kangjae Lee and Jiyeong Lee, A Geocoding Method on Character Matching in Indoor Spaces, *Journal of Korea Spatial Information Society*, **21**(1), pp.87-100.
- 2012 Dong-hoon Jeong, Bong-bae Jang, Jiyeong Lee, So-il Hong, Peter van Oosterom, Kees de Zeeuw, Jantien Stoter, Christiaan Lemmen, and Jaap Zevenbergen, Initial Design of an LADM-based 3D Cadastre – Case Study from Korea, In *Proceeding of 3<sup>rd</sup> International Workshop on 3D Cadastres: Developments and Practices*, 25-26 October 2012, Shenzhen, China..
- 2012 Seulji Lee and Jiyeong Lee, Finding Isolated Zones through Connectivity Relationship Analysis in Indoor Space, *Korean Journal of Geomatics*, **30**(3), pp.229-240.
- 2012 Soyoung Park and Jiyeong Lee, The Research on Extraction of Topology Model using Straight Medial Axis Transformation Algorithm, *Journal of Korea Spatial Information Society*, **20**(2), pp.1-11.
- 2012 Hyesun Yun, Sonjong Young and Jiyeong Lee, Comparative Analysis on Korean and North American Cadastral System Using Comparative Analysis Model for Cadastral System, *Journal of Cadastre*, **42**(1), pp.99-126.
- 2011 Dong-hyun Shin, Jun-hwan Koh, Jiyeong Lee and Yun-soo Choi, An Understanding Level Analysis of Land Owners and Specialists for Actual Land Boundary System Settlement, *Journal of Cadastre*, **41**(2), pp.291-313.
- 2011 Seonghee Lee, Hyo-sang Li, Jiyeong Lee, Design and Implementation of 3D Cadastral Data Model and Database for 3D Cadastral Management System, *Journal of Cadastre*, **41**(2), p.193-207.
- 2011 Kang-Jae Lee, Gun-up Jang, Jiyeong Lee, Developing a Module to Store 3DF-GML Instance Documents, *Journal of Korea Spatial Information Society*, **19**(6), p.87-99.
- 2011 Seulji Lee, Jiyeong Lee, Navigable Space-relation Model for Indoor Space Analysis, *Journal of Korea Spatial Information Society*, **19**(5), p.75-86.
- 2011 Seulji Lee, Jiyeong Lee, Vulnerability Analysis on Fire Service Zone using Map Overlay Method in GIS, *Korean Journal of Geomatics*, **28**(6), p.91-100.
- 2011 Seokho Lee, Jiyeong Lee, Validation of Efficient Topological Data Model for 3D Spatial Queries, *Journal of Korea Spatial Information Society*, **19**(1), p.93-105
- 2010 Jimun Choi and Jiyeong Lee. Micro-level Emergency Response: 3D Geometric Network and Multi-agent based Modeling, submitted to *Urban Hazard and Disaster Analysis* (eds.: Pam Showalter and Yongmei Lu), Springer, New York, pp.415-426.
- 2010 Dae-Hyuen Nam, Chan-Gi Cho, Jiyeong Lee, A Preliminary Study on the Application of LOD for 3D Cadastre Construction, *Journal of Cadastre*, **40**(2), p.247-265.
- 2010 Seokho Lee, Seho Park, Jiyeong Lee, 3D Adjacency Spatial Query using 3D Topological Network Data Model, *Journal of Korea Spatial Information Society*, **18**(5), p.93-105.
- 2009 Jiyeong Lee. Global Positioning/GPS. In Kitchin R, Thrift N (eds) *International Encyclopedia of Human Geography*, Volume 1, pp. 548-555. Oxford: Elsevier.
- 2009 Jiyeong Lee. A GIS-based Geo-Coding Methods for Area-based Addresses and 3D Addresses in Urban Areas, *Environment and Planning B*, **36**, p86-106.



- 2009 Jinmu Choi, Seong-Gon Kim, Jiyeong Lee and Yun Soo Choi. Agent-Based Evacuation Simulation for Building Structure Evaluation, *GIScience & Remote Sensing*, **46**, No. 4, p. 1-18.
- 2009 Jay Hyoun Kwon and Jiyeong Lee. Book-Review: The 3-D Global Spatial Models: Foundation of the Spatial Data Infrastructure, *Photogrammetric Engineering & Remote Sensing*, **75** (7), p. 756.
- 2009 Jiyeong Lee and Inhye Park. Time-Dependent Optimal Routing in Micro-scale Emergency Situation, *Proceedings of the 4<sup>th</sup> International Workshop on 3D Geo-Information*, Eds. P. Maeyer, T. Neutens and M. Ryck, DCL Print & Sign (ISBN: 978-90-9024820-2), p. 13-32.
- 2009 Soyoung Park, Jiyeong Lee and Hyo-Sang Li. 3D Cadastre Data Model in Korea – based on case studies in Seoul, *Journal of Geographic Information System Association of Korea*, **17** (4), p. 485-500.
- 2009 Seok-Ho Lee, Jiyeong Lee and Hyong-Bok Kim. Utilizing Spatial-Data to Provide for U-Service Based on U-GIS, *Journal of Geographic Information System Association of Korea*, **17** (4), p. 405-416.
- 2009 Inhye Park and Jiyeong Lee. Time-Dependent Optimal Routing in Indoor Space, *Journal of Geographic Information System Association of Korea*, **17** (3), p. 361-370. (in Korean)
- 2009 Seho Park and Jiyeong Lee. Comparative Analysis of 3D Spatial Data Models, *Journal of Geographic Information System Association of Korea*, **17** (3), p. 277-285. (in Korean)
- 2009 Inhye Park and Jiyeong Lee. Modeling Spatial Data in a geo-DBMS using 3D Primitives, *Journal of Korea Spatial Information System Society*, **11**(3), p50-54. (in Korean)
- 2008 Jimun Choi and Jiyeong Lee. 3D Geo-Network for Agent-based Building Evacuation Simulation, *3D Geo-Information Sciences (LNG&C)*, Eds. Jiyeong Lee and Sisi Zlatanova , Springer, p. 283-300.
- 2008 Jiyeong Lee and Sisi Zlatanova. A 3D Data Model and Topological Analyses for Emergency Response in Urban Areas, *Geo-Information technology for emergency response*, Eds. Sisi Zlatanova and Jonathan Li, Taylor & Francis, p. 143-168.
- 2007 Jiyeong Lee and June Hwan Koh. A Conceptual Data Model for a 3D Cadastre in Korea, *Korean Journal of Geomatics*, **25** (6-1), p1-10.
- 2007 Jiyeong Lee. GIS-based Evacuation Systems, *GIM International: The Global Magazine for Geomatics*, 21(11), p49.
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- 2007 Jiyeong Lee. A 3D Navigable Data Model to Support Emergency Response in Micro-Spatial Built-Environments, *Annals of the Association of American Geographers*, **97** (3), p512-529.
- 2006 Jiyeong Lee and Hag-Yeol Kim. A Geocoding Method Implemented for Hierarchical Areal Addressing System in Korea, *The Journal of GIS Association of Korea*, 14:4, p403-419.
- 2005 Jiyeong Lee and Mei-Po Kwan. A Combinatorial Data Model for Representing Topological Relationships between 3-D Geographic Entities, *International Journal of Geographical Information Sciences*, **19** (10), p1039-1056.
- 2005 Jiyeong Lee. 3D GIS in Support of Disaster Management in Urban Areas, *Directions Magazine* November (Electronic Version)  
[http://www.directionsmag.com/article.php?article\\_id=2049&trv=1](http://www.directionsmag.com/article.php?article_id=2049&trv=1).

- 2005 Mei-Po Kwan and Jiyeong Lee. Emergency response after 9/11: the potential of real-time 3D GIS for quick emergency response in micro-spatial environments, *Computers, Environment and Urban Systems*, 29, pp 93-113.
- 2004 Jiyeong Lee. A Spatial Access Oriented Implementation of a Topological Data Model for 3D Urban Entities, *GeoInformatica*. 8:3, p235-262.
- 2004 Jiyeong Lee. 3-D GIS for Geo-coding Human Activity in Micro-scale Urban Environments, in M. Egenhofer, C. Freksa and H. Miller, eds., *Geographic Information Sciences: Springer's Lecture Notes in Computer Science (LNCS 3234)*. New York: Springer, p. 162-178.
- 2004 Mei-Po Kwan and Jiyeong Lee, Geovisualization of human activity patterns using 3D GIS: A time-geographic approach. In Michael Goodchild and Donald Janelle, eds., *Spatially Integrated Social Science: Examples in Best Practice*. Oxford: Oxford University Press: p48-66.

***Proceedings (Peer-Reviewed):***

- 2004 Jiyeong Lee and Hamid Yunus. 3D Cadastre System using the Node-Relation Structure in GIS. In *Proceeding of 24<sup>th</sup> Annual ESRI International User Conference*, San Diego, CA.
- 2003 Jiyeong Lee. A GIS-based Model for Evaluating Agricultural Land based on Crop Equivalent Rate (CER). In *Proceeding of 23<sup>rd</sup> Annual ESRI International User Conference*, San Diego, CA.
- 2001 Jiyeong Lee. 3D Data Model for Representing Topological Relations of Urban Features, In *Proceeding of 21<sup>st</sup> Annual ESRI International User Conference*, San Diego, CA.
- 1997 Jiyeong Lee. An Object-Oriented Approach to the Analysis of Land Information System, In *Proceeding of '97 GIS/LIS Conference*, Cincinnati, Ohio.

***Books:***

- 2008 Jiyeong Lee and Sisi Zlatanova (Eds.). *3D Geo-Information Sciences (Lecture Notes in Geoinformation and Cartography)*, Springer-Verlag, Berlin, Germany (ISBN: 978-3-540-87394-5).
- 1988 Young Song, Jiyeong Lee, et al. *Engineering Graphics*, Dong-Myung press, Korea.

***Standards (International and Domestic):***

- 2021 Jiyeong Lee, Indoor Spatial Data Model, adopted by TTA TC4, Korea.
- 2020 K-S Kim and Jiyeong Lee, An Extension Model to attach Points of Interest into IndoorGML (OGC Discussion Paper), adopted by Open Geospatial Consortium (OGC) Inc., OGC 20-054r1.
- 2019 K-S Kim and Jiyeong Lee, Anchor Node Extension in IndoorGML – Seamless Navigation between Indoor and Outdoor Space (OGC Discussion Paper), adopted by Open Geospatial Consortium (OGC) Inc., OGC 19-004.
- 2014 Jiyeong Lee, Ki-Joune Li, Sisi Zlatanova, Thomas H. Kolbe, Claus Nagel, Thomas Becker, IndoorGML v.1.0., adopted by Open Geospatial Consortium (OGC) Inc., OGC 14-005r3.
- 2010 Claus Nagel, Thomas Bercker, Robert Kaden, Ki-Joune Li, Jiyeong Lee, Thomas Kolbe, Requirements and Space-Event Modeling for Indoor Navigation (OGC Discussion Paper), submitted to Open Geospatial Consortium Inc., OGC 10-191rl.

***Unpublished Technical Papers:***

- 1999 Jiyeong Lee. Spatial Relations of Indoor Radon Level to Geological and Environmental Factors. A report to Ohio Department of Health and US EPA.

- 1997 Jiyeong Lee. Relationship between Radon Levels and Spatial Location: Decision Support System in GIS. A report to Ohio Department of Health and US EPA.
- 1995 Jiyeong Lee. Land Use Planning with Geographic Information System: Optimization of Land Development Suitability, Delaware County Regional Planning Commission, Ohio.
- 1995 Jiyeong Lee. Developing Land Suitability Model for Residential Land Use with Geographic Information System, Delaware County Regional Planning Commission, Ohio.
- 1993 Jiyeong Lee and five persons. *University District - Design Review Board Evaluation*, Technical Report, City of Columbus, Ohio.

### **Meetings and Conference Presentations (International):**

- 2021 Alexis Claridades and Jiyeong Lee, “Establishing Indoor Subspacing Requirements of a LoD Model for Generating Network-based Topological Data”, Philippine Geomatics Symposium 2021, November 17-19, online.
- 2021 Alexis Claridades, Misun Kim, Sunyoung Park and Jiyeong Lee, “Towards Representing Transitional Spaces: Developmental Direction for IndoorGML Anchor Nodes”, 3D GeoInfo Conference, October 11-14, online.
- 2019 Alexis Claridades, Dasol Ahn and Jiyeong Lee, “Developing a Data Fusion Strategy between Omnidirectional Images and IndoorGML Data”, GeoAdvances 2019, Nov. 14-15, Manila, Philippines.
- 2016 Hyojin Jung and Hyeyoung Kang and Jiyeong Lee, “The Concepts of Level of Detail in 3D Indoor Models”, FIG Working Week 2016, May 2-6, Christchurch, New Zealand.
- 2015 Hyojin Jung and Jiyeong Lee, “Indoor subspacing to implement IndoorGML for indoor navigation”, JIGC 2015 3D GeoInfo Conference, October 28-30, Kuala Lumpur, Malaysia.
- 2015 Munkhbaatar Buuvibaatar and Jiyeong Lee, “A Study on the improvement of cadastral system in Mongolia-Focused on National Land Information System”, JIGC 2015 3D GeoInfo Conference, October 28-30, Kuala Lumpur, Malaysia.
- 2015 Munsu Kim and Jiyeong Lee, “Developing a method to generate IndoorGML data from the omni-directional image”, JIGC 2015 3D GeoInfo Conference, October 28-30, Kuala Lumpur, Malaysia.
- 2015 Sangmuk Seok and Jiyeong Lee, “Analyzing the impact of habitat patches on wildlife road-kill”, JIGC 2015 3D GeoInfo Conference, October 28-30, Kuala Lumpur, Malaysia.
- 2013 Yunji Kim and Hyeyoung Kang and Jiyeong Lee, “Development of Indoor Spatial Data Model Using CityGML ADE”, 2013 8<sup>th</sup> 3D GeoInfo Conference, November 28, Istanbul, Turkey.
- 2013 Kangjae Lee and Jiyeong Lee, “Ontology-based Semantic Queries in Indoor Spaces”, 2013 AAG Annual Meeting, April 9-13, Los Angeles, California, U.S.A..
- 2013 Kangjae Lee and Jiyeong Lee, “Indoor-Space Awareness Using Descriptive Data”, IARIA GeoProcessing 2013: The Fifth International Conference on Advanced Geographic Information Systems, Applications, and Services, February 24-March 1, Nice, France.
- 2012 C-J Kim and Jiyeong Lee, “Toward a realistic hub network model: Examining differences between theoretical and practical hub locations”, 2012 Annual Association of American Geographers, February 24-29, New York, U.S.A

- 2011 Kang-Jae Lee and Jiyeong Lee, “Developing a Module for Storage of GML Instance Documents in Relational Databases”, ISPRS Shanghai 2011 Workshop Dynamic and Multi-Dimensional GIS, October 17-19, Shanghai, China.
- 2011 Sulji Lee and Jiyeong Lee, “Finding Isolated Zones in Indoor Space using Network-based Connectivity Algorithm”, ISPRS Shanghai 2011 Workshop Dynamic and Multi-Dimensional GIS, October 17-19, Shanghai, China.
- 2010 Soyoung Park and Jiyeong Lee, “Data Model for 3D Cadastre in Korea”, GEOProcessing 2010: 2<sup>nd</sup> International Conference on Advanced Geographic Information Systems, Applications and Services, February 10-16, St. Maarten, Netherlands Antilles.
- 2009 Jiyeong Lee, “Indoor GIS: Indoor Spatial Awareness”, 2009 OGC Technical and Planning Committee Meeting, December 7-11, Mountain View, CA, U.S.A..
- 2009 Jiyeong Lee, “Indoor Space: A New Notion of Space”, 4<sup>th</sup> International Workshop on 3D Geo-Information (3D GeoInfo 2009), November 4-5, Ghent, Belgium. (Keynote Speak)
- 2009 Jinmu Choi and Jiyeong Lee, “Agent-based Building Structure Evaluation for Evacuation”, 2009 Annual Meeting of AAG, March 22-27, Las Vegas, NV, U.S.A..
- 2008 Jinmu Choi and Jiyeong Lee, “3D Geo-Network for Agent-based Building Evacuation Simulation”, 3<sup>rd</sup> International Workshop on 3D Geo-Information (3D GeoInfo 2008), November 13-14, Seoul, South Korea..
- 2008 Jiyeong Lee, “Spatial Neighborhood-based Data Query using 3D Network-based Topological Model”, Fifth International Conference on Geographic Information Science (GIScience 2008), September 23-26, Park City, Utah, U.S.A..
- 2008 In Hye Park and Jiyeong Lee, “Defining 3D Spatial Neighborhoods for Topological Analysis using a 3D Network-based Topological Data Model – CA-based Building Evacuation Simulation”, ISPRS 2008 Beijing, July 3-11, Beijing, China.
- 2007 Jiyeong Lee, “3D Spatial Data Analysis”, 2<sup>nd</sup> International Workshop on 3D Geo-Information, December 12-14, Delft, the Netherlands.
- 2007 Jiyeong Lee, “Trends of 3D GIS: Past, Present and Future”, Korean Society of Surveying Geodesy Photogrammetry and Cartography Annual Conference, October 12, Deagu, Korea.
- 2006 Jiyeong Lee, “3D Network Model for Intelligent Building Evacuation Systems in Urban Areas”, 102<sup>nd</sup> AAG Annual Conference, March 7-11, Chicago, IL.
- 2005 Jiyeong Lee, “3-D GIS in Supporting Emergency Management in Urban Areas”, 2<sup>nd</sup> Geospatial Research Seminar at 2005 Bentley Users Conference, May 8-12, Baltimore, MD (Invited by Bentley Co.).
- 2005 Jiyeong Lee, “3-D Geo-information for Disaster Management in Urban Areas”, 101<sup>st</sup> AAG Annual Conference, April 5-9, Denver, CO.
- 2004 Jiyeong Lee, “3-D GIS for Geo-coding Human Activities in Micro-scale Urban Environments”, Third International Conference, GIScience 2004, Oct. 20-23, Adelphi, MD.
- 2004 Jiyeong Lee, “3-D Urban GIS for Geo-coding Human Activity Patterns”, the 100<sup>th</sup> AAG Annual Meeting, March 14-19, 2004, Philadelphia, PA.
- 2003 Jiyeong Lee, “GIS and GPS with Wireless Communication-Example: Taking the Process of Finding a Home to the Next Level”, Wireless and Mobile Learning Technologies Conference, Mankato, MN, Nov. 4-5, 2003 (invited).
- 2003 Richard Moore and Jiyeong Lee, “Taking the Process of Finding a Home to the Next Level – The Geographic Level”, 13<sup>th</sup> Minnesota GIS/LIS Consortium, St. Paul, MN, Oct. 8-11, 2003.

- 2003 Tonya Rogers and Jiyeong Lee, "Using GIS and GPS Systems in an Evaluation of Pheasant Winter Habitat Provided by Farm Programs", 13<sup>th</sup> Minnesota GIS/LIS Consortium, St. Paul, MN, Oct. 8-11, 2003 (Oral and Postal Presentations).
- 2003 Brandon Whitehead, Richard Moore and Jiyeong Lee, "Integrating GPS and GIS Techniques in Training Future GIS Professionals: A Student Case Study", 13<sup>th</sup> Minnesota GIS/LIS Consortium, St. Paul, MN, Oct. 8-11, 2003.
- 2003 Jiyeong Lee, "iPAQs, GPS, Internet GIS and wireless communication with a map server", Educational Applications of Wireless Computing Technology Conference, Moorhead, MN, May 21, 2003 (invited).
- 2002 Jiyeong Lee, "Real-Time 3D GIS-based Intelligent Emergency Response System in Urban Environments", 2002 AAG West Lakes Division Annual Meeting, Minneapolis, MN, October 17-19, 2002.
- 2002 Jiyeong Lee, "Building a Geospatial Data Hub of the Southern Minnesota Region – Community Wide Access to GIS Data", 12<sup>th</sup> Annual Conference of Minnesota GIS/LIS Consortium, Duluth, MN, October 2-4, 2002.
- 2002 Jiyeong Lee, "Cellular automata and land use planning based on optimization of land development suitability", 98<sup>th</sup> Annual Meeting of AAG, Los Angeles, CA, March 18-23, 2002.
- 2002 Mei-Po Kwan and Jiyeong Lee, "GIS-based Intelligent Emergency Response (GIER): The Potential of Real-Time 3D GIS for Quick Emergency Response in Micro-Spatial Environments." Paper presented at an NSF/AAG sponsored specialist workshop on *The Geographical Dimensions of Terrorism: A Research Agenda for the Discipline*. Washington D.C., January 24-27.
- 2001 Jiyeong Lee, "A Spatial Access Oriented Implementation of a Topological Data Model for 3D Urban Entities", 2001 University Consortium for Geographic Information Science (UCGIS) Summer Assembly, Buffalo, NY, June 21-24, 2001.
- 2001 Jiyeong Lee, "A Combinatorial Data Model For Representing Topological Relationships between 3-D Geographic Entities", 97<sup>th</sup> AAG Annual Meeting, New York, NY, Feb. 27 - Mar. 3, 2001.
- 2001 Jiyeong Lee, "A 3-D Object-based Data Model for Representing Topological Relations in Urban Micro-Spatial Environments" Geography Colloquium Series at Department of Geography, The Ohio State University, Columbus, Ohio, February 15, 2001.
- 2000 Jiyeong Lee. "A 3-D Object-Oriented Data Model for Representing Topological Relations", 29<sup>th</sup> International Geographer Congress (IGC) at Seoul, Korea, August 14-18, 2000.
- 2000 Jiyeong Lee and Mei-Po Kwan. "A 3-D Object-Oriented Data Model for Representing Geographic Entities in Built-Environments, 96<sup>th</sup> AAG Annual Meeting, Pittsburgh, Pennsylvania, April 4-8, 2000.
- 1998 Jiyeong Lee and Phil Laurien. "2<sup>nd</sup> Generation GIS Applications in Local Government", 8<sup>th</sup> Ohio GIS Conference, Columbus, Ohio, September 26-28, 1998.

### **Invited Talks / Presentations (International):**

- 2017 Jiyeong Lee, "3D Geospatial Information Services in South Korea" PhilGEOG 2017 Geospatial 3D at University of the Philippines-Diliman on May 2017.
- 2013 Jiyeong Lee, "3D Indoor Space: Indoor Spatial Awareness" GEOProcessing 2013 at Hotel Novotel Cap 3000 on February 2013.
- 2012 Jiyeong Lee, "Spatial Temporal Optimal Routing in Micro-scale Emergency Situation" 11<sup>th</sup> International Symposium & Exhibition on Geoinformation (ISG2012) at Kuala Lumpur on 25-26 September 2012.

- 2006 Jiyeong Lee, “Map Overlay and Suitability Analysis in GIS” SPACE (Spatial Perspectives on Analysis for Curriculum Enhancement) Workshop at OSU, Columbus, OH, June 2006.
- 2006 Jiyeong Lee, “What GIS can do: For Homeland Security and Emergency Responses in Macro- and Micro-scale Urban Areas” at VisCenter Seminar, the Charlotte Visualization Center, UNC-Charlotte, March 2006.
- 2004 Jiyeong Lee, “Emergency Response After 9/11: The 3D GIS for Emergency Response in Micro-Space Urban Areas” at CMPD (Charlotte and Mecklenburg Police Department), Charlotte, NC, December 2004.
- 2004 Jiyeong Lee, “The Potential Real-Time 3-D GIS for Quick Emergency Response System in Micro-Space”, Department of Geography and Earth Sciences, UNC-Charlotte, February 2004.
- 2002 Jiyeong Lee, “A 3-D Data Model for Representing Topological Relationships between Spatial Entities in Urban Environments”, Department of Geography, University of Wisconsin – Milwaukee, December 2002.
- 2001 Jiyeong Lee, “A Spatial Access Oriented Implementation of a Topological Data Model for 3D Urban Entities”, Department of Geography, University of Georgia, December 2001.
- 2001 Jiyeong Lee, “Spatial Interpolations for Generating Surface Data in GIS”, Department of Geography, Minnesota State University – Mankato, March 2001.

**Grants Awarded:**

- 2021-2023 Jiyeong Lee, “Development of Middleware for Spatial Data Integration to Build Digital Twin”, funded by Ministry of Education, Science and Technology, Korea. \$250,000.
- 2017-2021 Ki-Joune Li, Hyunsang Choi, Jiyeong Lee, and ten others, “Developing World-Leading Cost Effective Indoor Spatial Information Core Technologies and Its Test Beds”, Research Grant funded by Ministry of Land Infrastructure and Transport. \$800,000 (total \$25,000,000).
- 2017 Jiyeong Lee and others, “Development of Integrated Middleware to Support Military Actions in Urban Areas”, supported by Civil-Military Technology Corporation Program funded by Defense Acquisition Program Administration, Korea. \$50,000 (total \$1,000,000).
- 2017-2020 Jiyeong Lee, “Development of Middleware for Integration of Administrative Data using Open Source and Deep Learning”, funded by Ministry of Education, Science and Technology, Korea. \$150,000.
- 2011-2016 Hyunsang Choi, Jiyeong Lee, Ki-Joune Li, and three others, “Development for Advanced Technology of Realistic 3D GI”, Research Grant supported from Cutting-edge Urban Development - Korean Land Spatialization Research Project funded by Ministry of Land, Transport and Maritime Affairs. \$400,000 (total \$2,000,000).
- 2015 Jiyeong Lee, “A Research on the Reasonable and Efficient Plan of Cadastral Resurvey Project”, funded by Korea Development Institute, Korea. \$20,000.
- 2014 Jiyeong Lee, “Analysis the User Needs for Efficient Use of National POIs and Internet Map”, funded by AllForLand Corporation, Korea. \$19,000.
- 2014 Jiyeong Lee, “Establishing the Plan for Standardized DB of National POIs and Managing”, funded by Saehan Aero Survey Corporation, Korea. \$14,000.
- 2010-2012 Jiyeong Lee, “3D Indoor Context Awareness in u-Environment”, funded by Ministry of Education, Science and Technology, Korea. \$150,000.

- 2012 Jiyeong Lee, “Updating the Seamless Digital Map and Development the Technique”, funded by National Geographic Information Institute, Korea. \$56,000.
- 2011 Jiyeong Lee, “A Research on the Strategies for Advancement of National Map”, funded by National Geographic Information Institute, Korea. \$46,000.
- 2011 Jiyeong Lee, “A Research on the Cadastral System and Geospatial Industry Trends of North America”, funded by Korea Cadastral Survey Corporation, Korea. \$25,000.
- 2011 Jiyeong Lee, “Designing the DB of 3D Land Spatialization and Standard for TTA”, funded by Korea Cadastral Survey Corporation, Korea. \$19,000.
- 2010 Jiyeong Lee, “Standard for Digital Map Data Model and Data Structure”, funded by National Geographic Information Institute, Korea. \$55,000.
- 2009-2010 Jiyeong Lee, “3D Data Model for Ubiquitous-Cadastre in Seoul”, funded by City of Seoul, Korea. \$25,000.
- 2009 Jiyeong Lee, “3D Land Spatialization Data Model in Korea”, funded by National Geographic Information Institute, Korea. \$45,000.
- 2008-2009 Jiyeong Lee, “Defining 3D Spatial Neighborhoods for Topological Analyses using a 3D Network-based Topological Data Model”, Faculty Research Grant funded by The University of Seoul, Korea. \$10,000.
- 2007-2011 Ki-Joune Li, Jiyeong Lee, and seven others, “Indoor Spatial Awareness: Applications and Development Indoor Spatial DB using Architecture Drawings”, Research Grant supported from Cutting-edge Urban Development - Korean Land Spatialization Research Project funded by Ministry of Land, Transport and Maritime Affairs. \$300,000 (total \$2,000,000).
- 2007-2008 Yunsoo Choi, Jiyeong Lee, and three others, “Disaster Protection System for a Large Scale Underground Complex Space based on Ubiquitous Technology”, which is supported from Future Mega-City Development project funded by the City of Seoul. \$100,000 (total \$600,000).
- 2007-2010 Yunsoo Choi, Jiyeong Lee, and three others, “Advanced Education for Global u-spatial Information” which is a Brain Korea 21 (BK21) project funded by Ministry of Education. \$500,000.
- 2006 William Ribarsky, Jiyeong Lee, Zachary Wartell and Eric Sauda, “3D Modeling and Interactive Visualization of Urban Areas”, Research Grant funded by Mecklenburg County, NC. \$55,064.
- 2005-2006 Jiyeong Lee, “A 3D Geo-information for Disaster and Emergency Management”, Faculty Research Grant funded by The University of North Carolina at Charlotte, NC. \$5,750.
- 2003 Jiyeong Lee, “3D Cadastre System using the Node-Relation Structure in GIS”, funded by College of Social and Behavioral Sciences, Minnesota State University-Mankato, MN. \$4,350 (Research Reassignment).
- 2003 Jiyeong Lee, “3-D GIS Visualization Using VRML”, funded by College of Social and Behavioral Sciences, Minnesota State University-Mankato, MN. \$500 (Small Research Grant).
- 2003 – 2004 Jiyeong Lee and Martin Mitchell, “The Value of Farm Programs for Providing Winter Cover and Food for Midwestern Pheasants”. Farmland Wildlife Populations and Research Group, Minnesota Department of Natural Resource. \$19,000.
- 2003 Jiyeong Lee, Faculty Improvement Grant (FIG), Minnesota State University – Mankato. \$2,000.



- 2002 Jiyeong Lee, Cindy Miller and Martin Mitchell, "The Wireless Campus Initiative". Minnesota State University (Gutknecht Grant). 18 Compaq iPAQ 3650 units and \$1,000 (total \$11,800).
- 2002 – 2003 Jiyeong Lee and Martin Mitchell, "The Value of Farm Programs for Providing Winter Cover and Food for Midwestern Pheasants". Farmland Wildlife Populations and Research Group, Minnesota Department of Natural Resource. \$25,500.
- 2001 Jiyeong Lee. "Building a Geospatial Data Hub of the Southern Minnesota Region – Community Wide Access to GIS Data". Center for Applied Social Science, Minnesota State University. \$3,000.
- 1996 – 2000 Frances Veverka, Paul Rosile and Jiyeong Lee. "Spatial Relations of Indoor Radon Level to Geological and Environmental Factors". Ohio Department of Health, Bureau of Radiation Protection. Funded by US EPA. \$100,000 (\$10,000 for GIS Analysis by Jiyeong Lee).
- 1999 Jiyeong Lee. ESRI Local Government GIS Start-Up Grant, Environmental Systems Research Institute, INC., \$15,973.

### **Awards:**

- 2022 Seoul Mayor Award, City of Seoul, Korea.
- 2015 Order of Service Merit (Aquamarine Stripes), Ministry of the Interior and Safety, Korea.
- 2015 Seoul Mayor Award, City of Seoul, Korea.
- 2015 Award, Ministry of Land, Infrastructure and Transport, Korea.
- 2014 Best Paper Award, Conference on Geo-Spatial Information (CogSI) 2014 Spring, KOREA Spatial Information Society, Korea..
- 2013 Best Paper Award, The Fifth International Conference on Advanced Geographic Information Systems, Applications, and Services GEO Processing 2013, Nice, France
- 2006 University Consortium for Geographic Information Science (UCGIS) Young Scholar Award, sponsored by Intergraph Inc.
- 2001 Best Oral Paper Presentation Award, Sponsored by Intergraph Inc. at 2001 University Consortium for Geographic Information Science (UCGIS) Summer Assembly, Buffalo, NY.
- 2001 Certificate for Excellent Oral Paper Presentation, 2001 UCGIS Student Poster Competition, Buffalo, NY.
- 2001 The Best Paper Award, 2001 GISSG Student Paper Competition at 97<sup>th</sup> AAG, New York, NY.
- 2000 Map Gallery 3<sup>rd</sup> Place, Map Title: Orange Township Comprehensive Plan. Awarded by OGRIP at 10<sup>th</sup> Ohio GIS Conference.
- 1993 Faculty Prize, in Department of City & Regional Planning, The Ohio State University.
- 1993 Award for Best Graduate Student Project, The Ohio Conference a Chapter of American Planning Association.
- 1992 Faculty Prize, in Department of City & Regional Planning, The Ohio State University.

### **Journal Reviewer:**

- *International Journal of Geographical Information Sciences*
- *Annals of the Association of American Geographers*
- *The Professional Geographer*
- *Computers, Environment and Urban Systems*

- *Journal of Photogrammetric Engineering & Remote Sensing (PE&RS).*
- *International Journal of Risk Assessment and Management*
- *Journal of Geographical Systems*
- *Cartographica*

### **Professional Service:**

2023 – 2025	Professional Committee Member of Smart City Committee, City of Seoul
2022 – 2025	Project Leader, ISO 19109 Revision Project, International Organization for Standardization / Technical Committee 211 – Geographic Information (ISO/TC211)
2015 – 2021	Co-Chair, Open Geospatial Consortium (OGC) POI Standard Working Group (SWG)
2016 – 2022	Chief Editor, Open Geospatial Consortium (OGC) IndoorGML Standard Working Group (SWG)
2012 – 2016	Associate Editor, International Journal of 3-D Information Modeling (IJ3DIM), IGI Global Press.
2011 – 2016	Vice-Chair, Open Geospatial Consortium (OGC) IndoorGML Standard Working Group (SWG)
2012 –	Delegate and Professional Committee of National Geographic Information Institute (NGII), South Korea
2007 –	Delegate and Professional Committee of South Korea, International Organization for Standardization / Technical Committee 211 – Geographic Information (ISO/TC211).
2008 – 2012	Co-Chair, WG IV/8 Spatial Data Integration for Emergency Services, International Society for Photogrammetry and Remote Sensing (ISPRS)
2007 – 2008	Program Chair, 3D GeoInfo 08, 3 <sup>rd</sup> International Workshop on 3D Geo-Information, Seoul, South Korea. <a href="http://3DGeoInfo.uos.ac.kr">http://3DGeoInfo.uos.ac.kr</a> .
2007 – 2008	Program Committee, Joint ISCRAM-CHINA and Gi4DM Conference, Harbin, China, 4-6 August 2008.
2006 – 2007	Program Committee, 3D geoinfo 07, 2 <sup>nd</sup> International Workshop on 3D Geo-Information, Delft, the Netherlands. <a href="http://www.3d-geoinfo-07.nl">http://www.3d-geoinfo-07.nl</a> .
2005 – 2007	Charter Faculty Member in the Charlotte Visualization Center (VisCenter), UNC-Charlotte
2005 – 2007	Member of Faculty Associate, the Center of Applied Geographic Information System (CAGIS), UNC-Charlotte
2005 – 2008	Member, WG IV/8 Spatial Data Integration for Emergency Services, International Society for Photogrammetry and Remote Sensing (ISPRS)
2005 – 2007	Member, Budget/Equipment Committee, Department of Geography and Earth Sciences, the University of North Carolina at Charlotte.
2005 – 2006	Member, Scientific Committee, International Workshop on 3D Geoinformation (GeoInfo '06), Kuala Lumpur, Malaysia.
2004 – 2007	Delegate, UNC-Charlotte, University Consortium for Geographic Information Sciences.
2003 – 2004	Manager, GIS/GPS Research Center, Minnesota State University (ESRI Authorized Learning Center).
2003 – 2004	Member, Research Committee, College of Social and Behavioral Sciences, Minnesota State University.

- |             |   |
|-------------|---|
| 2002 – 2004 | Representative, ESRI site license and ESRI Virtual Campus, Minnesota State University.                          |
| 2002 – 2004 | Member, Teaching and Learning Committee, College of Social and Behavioral Sciences, Minnesota State University. |

### **Professional Memberships:**

- Association of American Geographers (Since 1999)
- Urban and Regional Information Systems Association (Since 1996)

### **Professional Licenses:**

- ESRI Authorized Migrating ArcView GIS Instructor (Since 2003)
- ESRI Authorized ArcGIS Instructor (Since 2003)
- Architectural Engineer (Issued by Korean Architecture Institute)
- Landscape Architect (Issued by Korean Landscape Architecture Institute)

### **References:**

Distinguished Prof. Mei-Po Kwan (Advisor)  
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The Ohio State University  
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Last Updated: 03/03/2023